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THOS. A. ASHBY, M. D.,

EUGENE F. CORDELL, M. D.

BALTIMORE, MD.

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—CONTENTS.—

ORIGINAL PAPERS.

- The Best Treatment in Gynæcology. By Horatio R. Bigelow, M. D. 1
The Abuse of Silver Nitrate and Blisters in Eye and Ear Diseases. By Edmund C. Rivers, M. D. 5

CLINICAL LECTURES.

- Tumor in the Neck. By Oscar J. Coskery, M. D. 8

SOCIETY REPORTS.

- Eighty-third Annual Meeting of the Medical and Chirurgical Faculty of Maryland. 10

REVIEWS AND BOOK NOTICES.

- Drugs that Enslave (*Kane*). 15
A Text-Book of Human Physiology (*Flint, Jr.*). 16
The Student's Manual of Histology (*Stowell*). 16
The Principles and Methods of Therapeutics (*Gubler*). 16
Lectures on Diseases of the Nervous System, Especially in Women (*Mitchel*). 17

EDITORIAL.

- The Eighty-third Annual Meeting of the State Faculty—Introductory—Editorial Announcement. 18

MISCELLANY.

- Shortcomings of Uterine Pathology—Criminality of Communication of Syphilis—Professional Status in New York City—Tar Water in Obstetrical and Gynæcological Practice—How Doctors may get more money—Virginia Medical Monthly—Extra-uterine Pregnancy—Treatment of Anæmia—Practice of Medicine by Women—Compulsory Vaccination in France—On to Richmond—Faculty Appointment—Vesico-vaginal Fistula Treated by the Formation of a Recto-vaginal Fistula and Closure of the Vagina—Antiseptic Irrigation vs. Spray—Artificial Teeth Swallowed during Sleep—Excision of Pylorus for Cancer—Society Bulletin. 19
MEDICAL ITEMS. 23

PHYSICIANS VISITING LIST, PRESCRIPTION BOOKS, REMOVABLE COVERS.

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IN ALL ITS BRANCHES.

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BALTIMORE, MAY 1, 1881.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

THE REST TREATMENT IN GYNÆCOLOGY.

BY HORATIO R. BIGELOW, M. D.,
WASHINGTON, D. C.

About two years and a half since, I was consulted by Mrs. B., who gave me the following history:

Age twenty-eight; married; no children; above the medium height; sallow complexion; face care-worn; body emaciated; the parietes sunken, and the prominences of the hip well marked; weight 120 pounds. She had been all her life a resident of Gloucester Co., New Jersey, and different members of her family had suffered with intermittent fever. Two brothers and a sister are now victims of malarial jaundice. No inherited disease. She had been a strong, healthy woman, performing the functions of her sex with regularity and sufficiency. Had been fond of society, and had indulged herself in dancing and late hours. Circumstances having rendered it necessary for her to assume the responsibility of her own

support, she sought and obtained a position as school teacher. This necessitated long drives or walks during all seasons, and she was much exposed to the inclemency of the weather. The mental strain to a conscientious woman, desirous of impressing correct habits upon her pupils, was a great one, and from this time she began to lose weight, to suffer from nervousness and insomnia. From this time, too, so far as she remembers, her menstruation became scant, irregular, and was sometimes absent for several weeks. She has vague pains in the back and loins, the nature of which she did not understand. She was troubled with constipation, headache and extreme nervous exhaustion. Walking was difficult and sometimes impossible. All these symptoms became aggravated with the advance of time. Two years before her marriage a terrible grief came to her, and from that time she began to grow worse, so that upon her wedding-day she was a mere skeleton, without physical energy. Her complexion was extremely sallow, and the conjunctiva yellow. She has not had, so far as

she knows, any attack of ague; neither has she suffered from the pains of an obstructive jaundice. Her icterode appearance is intensified at each menstrual period. She has rectal and vesical tenesmus, unbearable back-ache. Inability to stand long, 'though walking is much easier than standing. There is pain in the region of the right ovary and down the right leg.

Examination revealed a short vagina with a retro-verted and somewhat retro flected uterus. The cervix was doughy and swollen, and the region around the neck of the bladder was extremely sensitive. During her treatment in Washington, which extended over a period of two years and more, I had the honor of consulting with several of our leading physicians. At first we endeavored to reduce the version by means of the sound within the cavity of the uterus. (This is always a dangerous experiment, even in the hands of the best gynæcologists, and I was somewhat adverse to its use). The pain following this procedure was of course excessive. A Smith's modified Hodge's pessary was applied, the patient being advised to rest in Sim's position with a pillow under the hips, to suspend the clothing from the shoulders, to use hot vaginal injections, and to keep the bowels open. About a week after the introduction of the pessary, just before or subsequent to her menstruation, a lancinating, excruciating pain set in, which made the removal of the pessary necessary. The pain was at first referred to the right iliac fossa. It then extended up the right side and along the greater curvature of the stomach. There was intense nausea and vomiting, which refused to yield to treatment. There was supra-pubic tenderness, but no fever. The pains were intermittent, coming on at intervals of ten minutes, vomiting setting in with the subsidence of the pain. This first attack lasted twenty-four hours, leaving the patient much pros-

trated, and so sore that she was unable to move herself in bed. Her appearance was as one suffering with an acute attack of icterus, so much so that one of the physicians supposed that she had an obstructive jaundice, as the pains simulated those of gall stones. Believing the cause to be due to artificial irritation of the womb, a pessary was not thereafter applied until she was removed to Philadelphia; neither was any subsequent effort at reduction made by the sound. The peculiar sallowness I attributed to the reflex action of the sympathetic. Each month, with one or two exceptions of intervals of two and three months, these peculiar pains returned, always with increasing severity, and extending over longer periods of time. Nothing quieted them but *very* large hypodermic injections of Magendie's sol. of morphia with atropia followed by opium suppositories. Her prostration and general condition became alarming. The womb was supported by pessaries of medicated cotton soaked in the glyc. of tannic acid. Once each month, midway between her period a mixture of chromic acid and water, partes æquales, was carried up to the fundus. The cervix was bled and covered with iodo-tannin.

The patient was given iron and bark, and later the antacid mixture. Rest, fresh air and nourishment were enjoined. Still, with each month the intense pain introduced itself with its following of nausea and exhaustion, with days and days of muscular soreness and of general "yellowness." The patient would often burst into a flow of tears without provocation. Her memory and eyesight became defective. A chance call would so excite her that she could not sleep. Reading, writing or sewing, all irritated her nerves. Finally, after lingering in this condition for so many months, she consented to go to Philadelphia and have a consultation with Dr. William Goodell. I had already

advised the doctor very fully of the nature of the case, so that upon our arrival he was prepared with a diagnosis, in which he was sustained by a thorough examination. The local trouble he made out to be a congested ovary, a short vagina with well marked retro-version. The constitutional disturbance he thought was a neurasthenia, of which the local disease might have been the primary cause, but which had been intensified by grief, and by the incessant worry of a teacher's life. The pain was purely and simply a nerve pain, but upon what physiological condition to be explained in the present stage of scientific medicine, no one could say. The jaundiced condition in part, perhaps, due to malaria, was chiefly owing to a spasm of the gall ducts due to the nervous influence of pain and grief—nerve shock. Dr. Goodell argued with much force, and with the logical soundness that comes of large experience and close observation, that the profession were prone to attribute every symptom to uterine derangements, when such exists, forgetting complications and intercranial diseases which may also obtain.

"How often," said he, "have we seen women with complete procidentia, or with other forms of uterine displacement much more complex than your patient's, going about their daily affair, with apparently little inconvenience, and certainly without a tithe of the physical prostration manifested in the case of Mrs. B."

He advised the rest treatment, and argued so soundly that I seconded him with great sincerity, and Mrs. B. was induced to place herself in his hands. A suitable room was obtained and a well-trained nurse was engaged. She was to go to bed, and to remain there absolutely for from four to six weeks. She was allowed no communication with the external world; not even letters, except from her husband, and these were limited to one

per week. She could see no one but her professional attendants. She was to make no movement of herself. In short, the most perfect REST, physical and mental, was the basis of treatment. For the first two days her diet was limited to skim milk; a glass every two hours. Then her regular meals were permitted with six glasses of rich milk per diem. Dialysed iron in gradually increasing doses, with an aperient pill, as occasion demanded, and Hoff's malt were all the drugs used, with one exception, when the bichloride of mercury and arsenic were given to overcome a malarial complication which Dr. Goodell thought might exist owing to the sallow complexion. The treatment began February 15th, 1881. After her menstruation for that month electricity was used by Dr. Crandall. Galvanism over the liver and ovary, with the faradic current over the trunk and extremities. The general current was obtained by placing the carbon point at the occiput, and the other pole of a Gaiffée battery in a basin of salt water, in which the feet of the patient had been immersed. Massage was also inaugurated. The influence of the electricity and massage was immediate and gratifying. Natural and refreshing sleep, an absence of cold hands and feet, and a general feeling of comfort followed in their wake. The muscles of the back and extremities developed rapidly. The pain in the side disappeared. The complexion became clear, and the digestion perfect. The milk, though taken in large quantities, never occasioned the least discomfort. Then followed the Swedish movements, so arranged as to strengthen the muscles most needing improvement. Meanwhile, Dr. Goodell was gradually rectifying the local dislocation. The womb was slowly tilted into position and the vagina lengthened by means of a long celluloid pessary.

On March 29th the patient went to

Atlantic City for two weeks. There was then only a slight sinistro lateral uterine deviation, the fundus was well up, and the vagina increased in length. The patient had gained three inches around the waist, an inch and one-half around each arm and leg, and had gained about ten pounds in weight. Her complexion was much clearer. She had no backache, no pain, no depression. At this time of writing, she weighs 132 pounds, and is still gaining. She feels perfectly well, is able to walk quite long distances without discomfort, and is very buoyant in spirits. She takes her iron regularly, with *nux vomica* after meals. She drinks six glasses of milk per diem, and every evening goes through the movements. After exercising in any way, she rests for ten minutes in the knee chest position, and then lies down for a half hour. During the entire treatment she has been threatened but once with one of her old attacks, and this was frightened away—thus demonstrating conclusive, that she had no gall stones.

The interesting features of the case are the pain and yellow complexion. Of the jaundice produced by mental emotion, Dr. Goodeve thus writes in Reynold's System of Medicine: "There are numerous cases on record in which this appears to have occurred. The mental emotions which have been known to bring on jaundice are grief or anxiety, anger or fright. It has been reported in certain cases to have appeared very suddenly, immediately upon the occurrence of the mental emotion. The older writers supposed it to be due to spasm of the gall-ducts or common duct. It is, however, hardly possible to conceive a spasm of the common duct, which would be persistent enough to arrest the bile sufficiently long for absorption. This jaundice would be attributed to suppression of secretion from deranged nervous influence by some writers, and by Frerichs and others to increased

formation and absorption of bile, or to diminished metamorphosis from the same cause. Dr. Bence Jones shows how this form of jaundice might arise owing to increased formation of bile through nervous disturbance, especially if at the same time there was interference with the condition of the blood. Referring to the experiments of Claude Bernard on the secretion of the salivary glands, he says: "It is very probable that the sympathetic nerve in the liver if at anized would stop the circulation by contracting the small blood vessels, and this would diminish the secretion of bile, whilst the branches of the pneumo-gastric which enter the liver, when stimulated, would relax the small blood vessels, and thus cause a more rapid circulation through the liver from which an excessive formation of dilute bile would result." Dr. Murchison thinks that this jaundice is due to diminished metamorphosis in the blood. The disorder has appeared more frequently when the cause has operated directly after a meal, and preceded by a sense of weight or uneasiness at the epigastrium and a feeling of sinking and difficulty of breathing. Bamberger attributes the symptoms to a nervous condition of the stomach and duodenum, which causes catarrhal state of the mucous membrane of the duodenum * * *."

It has been offered as an objection to the rest treatment, that few patients could submit to the isolation. That separation from husband and family would greatly magnify the mental intractability. This objection seems to be plausible, and I would, myself have entertained it, had I not seen women of the most delicate and sympathetic nature, gradually yield to it, and profit by it. For the first few days the home-sick feeling largely predominates, but this soon gives way to the euthanasia that comes of *perfect rest*. A life into which no disturbing element can enter, and into which the

hope and assurance of ultimate well being are controlling factors, is so rare that only they know its charm who have experienced it. In the case under discussion the ultimate recovery has been due to the logical and immediate diagnosis of Dr. Goodell. To his wise counsel and generous assistance I owe much, and I am not ashamed thus publicly to acknowledge the debt.

THE ABUSE OF SILVER NITRATE AND BLISTERS IN EYE AND EAR DISEASES.

BY EDMUND C. RIVERS, M. D.,

Chief of Clinic to the Chair of Eye and Ear Diseases, University of Maryland. Assistant Surgeon and Lecturer on Ophthalmoscopy at Presbyterian Eye and Ear Charity Hospital, etc.

I do not think I am very far wrong in saying, that there are no two remedies used in diseases of the eye and ear, upon the value of which, the general practitioner and specialist, differ more widely than the prescribing, in cases of inflammation of the eye and ear, of silver nitrate, and the employment of counter-irritation, by means of blisters. These two valuable remedies are used in two distinct ways. One is that, by which the oculist, familiar with the treatment of eye and ear diseases, is guided, and from which, he obtains most brilliant results. The other is that most frequently followed by the physician, who treats diseases of these organs, as they occur in his general routine of practice, and in the greater number of cases their misapplications prove more potent for evil than for good.

To many physicians, these two remedies, constitute apparently their entire ophthalmological pharmacopœia. In to the eyes of such unfortunate patients, who happen to apply to them for the alleviation of pain and suffering a strong solution of silver nitrate is at once instituted. If an eye is at all painful, whether the eye-

ball itself is inflamed or the conjunctiva injected, or even in cases in which they can find no other symptom than that of pain, it is deemed a sufficient indication to them to apply blisters to the temples and mastoid processes, often in addition to the silver nitrate to the eyes. In all cases falling under their treatment, resource is had to either one of these methods of treatment, or else both are combined without any regard as to what tissues of the eye are affected, whether it be conjunctiva, cornea, iris or other structures, and entirely ignoring the cause of the inflammation or other trouble, whether it be from syphilis, rheumatism or other constitutional disturbances, or whether it is due to some entirely local and functional cause. No matter what the disease be, the indications for treatment to them, and the so-called "remedies" are identically the same; and most frequently the result of treatment, also, is unfortunately for the patient, as well as his doctor, the same.

It becomes hardly necessary for me to say that the greater part of such cases are by no means benefited when prescribed for without the ordinary care and investigation which a doctor would feel in duty bound to bestow upon his patient if he was suffering from a disease affecting any other organ of his body, and in which he assuredly would not take upon himself the responsibility of prescribing until he had thoroughly investigated it, in regard to its cause, previous history, &c., and obtained some grounds upon which to base his subsequent treatment. As often happens, he does not recognize such data, as pointing to some special remedy to be applied, or some certain line of treatment to be followed out, and yet for obvious reasons it is necessary to prescribe *something*. He certainly would not be justifiable, nor his conduct wholly free from the justly deserved censure of his better informed

professional brethren, if in such a dilemma he should make use of remedies which at best are restricted to very narrow limits in their sphere of usefulness, and whose powers for harm are almost unlimited. If in such a case he should choose the most powerful drugs when he had at his command an immense number, whose power to do harm, to say the least, is almost nil, it is the general verdict that he should be considered guilty of something more than simple carelessness. How much more, then, should he be censured for prescribing such very powerful remedies as these in diseases of the eye and ear; when we consider, too, it is by no means such a difficult task to find out the true state of affairs. In very nearly every disease affecting these organs we find several remedies which prove of far more value in effecting a cure than silver nitrate or counter-irritation.

The result of such heroic applications, in by far the greater number of cases, can only be for the worse. The suffering of the poor unfortunate is materially augmented by the severe effects of the eye drops and all the remaining comfort entirely banished by application of blisters to the temples and behind the ears, until what between the disease and the doctor the patient, worn out with sleepless nights and suffering intensely with pain from the disease, and intensified by the applications, and the extreme soreness produced by the blisters, becomes truly a fit subject for pity. With the bad results thus obtained, it might be supposed that physicians would perceive "the error of their way and depart therefrom," but in a great many cases bad is even made worse by extending the blistering process to the nape of the neck.

A few days ago a patient came under my observation who will serve as a type of a class of patients who come under the care of the specialist almost daily, showing how very thought-

lessly and needlessly, as well as how very often, patients are made to suffer all the inconveniences as well as the pain of this truly "heroic treatment." The patient was a lady of about 35 years of age; for some time had suffered from pain in the eyes, which was decidedly increased by reading or sewing. At times they felt a little gritty, but gave no special annoyance unless she used them upon some fine work. Upon examination she was found to be simply hypermetropic (flat eye) and a pair of convex glasses removed all her trouble. Before coming under observation, however, she had consulted her family physician, who had directed a blister to the temples, which were followed by similar applications behind the ears. As her symptoms did not cease, as a last resort he blistered *her forehead*.

A few days previous to this I was consulted by a man about his eyes, and found he had an ordinary case of chronic granular conjunctivitis. He had been treated in a manner very similar to the case above referred to; besides blisters to his temples and behind his ears, the back of his neck had been used instead of his forehead. Nor do we have to search the literature of our science very thoroughly in order to find authority for the general practitioners' bad method of treatment of these troubles. When we read in that most excellent treatise, "Ringer's Therapeutics," the following paragraph: "Blisters behind the ear, and especially to the temple, are very useful in rheumatic, gouty and simple inflammation of the eye, relieving pain quickly and subduing inflammation, but less rapidly. * * * Obstinate forms of tenia tarri sometimes yield to repeated applications of flying blisters to the temples. Counter-irritation, by blistering fluid or croton oil liniment behind the ear often removes earache." (Ringer, 3rd ed.). And in Bartholow's *Materia Medica* which, together with the former work,

and a few others, constitute in a large number of cases the principle guides of treatment of such cases to the general physician, we find the following: "Inflammatory affections of the eye and ear are, as a rule, benefited by the application of blisters in the neighborhood of these organs." When we find such advice laid down in works like these, our surprise at this very prevalent method of treatment must be somewhat lessened.

Now though in some very few cases of eye diseases, blisters may possibly be of some slight service; and it is true the pain in rheumatic affections especially seem somewhat abated by them. I do not think we can ascribe the apparent change arising from their use, so much to the remedy as to the nature of the disease, which we all know is subject to great and rapid variations in its severity. As far as simple inflammation of the eye is concerned, no good can possibly come of their use. They can only serve to annoy the individual, without exerting any more influence over the course of the disease, than if they had been applied to the soles of his feet, as had been done by the family physician, in a case that afterwards came under the care of Prof. Chisolm, and which he has reported.

The use of silver nitrate in the practice of a specialist is as rare, as it is common with the general practitioner; and in his hands is confined almost entirely to affections of the conjunctiva, characterized by profuse purulent discharges, such as the conjunctivitis produced by gonorrhœal pus coming in contact with the eye, or in ophthalmia neonatorum produced by the discharges and secretions in the vagina, or severe cases of catarrhal ophthalmia. Even in such cases, however, the strength of the solution very rarely exceeds grsij-v to the ounce; and this is used with much caution, and only for a few days, and therefore should only be prescribed in

small quantity. Only recently a patient visited the Presbyterian Eye and Ear Hospital with a conjunctivitis, for which she had been treated by a general practitioner. She brought the bottle of eye drops to show what she had been using, when to the surprise of the hospital staff, she brought out of its paper cover a pint bottle full of nitrate of silver eye drops. Properly used, silver nitrate is in some cases a remedy of inestimable value, and results are obtained from its intelligent use, such as cannot be procured from any other treatment. But these cases are comparatively few in number. When indiscriminately used for corneal, iritic and retinal diseases, in the hand of those unskilled in the treatment of eye affections it becomes a power for untold evil and few drugs in our pharmacopœa are capable of greater and more permanent injury.

Considering the vast number of cases which come under the observation of the specialist, in which these two remedies, silver nitrate and blisters, have been most indiscretely and improperly employed; it would be far better if the general practitioner should strike them entirely from his list of eye remedies, and substitute in their stead the milder astringents of zinc sulphas, borax, etc., in very weak solutions. Remedies which are less restricted in their application and much more powerful for good, which at the same time they are much less potent for evil.

The *British Med. Journal* says that in the obstetrical departments of the Paris hospitals no precaution is taken to guard the lying-in women from infection. They may have lying on one side a patient dying of pyæmia and on the other a case of diphtheria or scarlatina. The mortality is beyond anything reached elsewhere; it is a wonder any women escape with their lives.

CLINICAL LECTURES.

TUMOR IN THE NECK.

BY OSCAR J. COSKERY, M. D.,

Professor of Surgery, College Physicians and Surgeons, Baltimore.

This patient, a colored man, aged 88, was born, raised and lived until about ten years ago in Rockbridge county, Virginia. Parents died at advanced age; children healthy. Fifteen years ago noticed lump in neck which has slowly and painlessly gone on increasing up to about six months ago, since when rapid growth and pain has appeared. Six years ago became blind (cause not ascertained), and now is led about. Except these conditions patient enjoys good health.

Condition on March 5, 1881: A large tumor three by four inches in size occupying front and left side of neck, extending from near chin to just above sternum, painless upon pressure, fluctuating at points, and moving upwards and downwards during efforts at deglutition. The daughter who accompanied the old man could give no further information.

The principal question was diagnosis. Was this tumor goitre, aneurism, enlargement of *glandulae concatinae* or something else? To take the third supposition first. Had the tumor been an enlarged lymphatic gland, it would have first appeared in the normal situation of these glands—the side of the neck. Upon this one point the patient and his daughter were clear. The tumor had first appeared in front of the trachea, or very slightly outside of median line. Again age is against enlargement of the *glandula concatinata* to so great an extent (cancer of these organs especially primary cancer being amongst the pathological curiosities), that this hypothesis need scarcely be thought of. Again, no matter how chronic enlargement of these glands may be, they are very apt at some period of their course to

have been painful. Another point is that this tumor, although dilated at several points into evident cysts, still has not that irregular knobbed feeling, found especially where several glands become matted together, as would have been necessary to the formation of a lump so large as the present one.

Is this an aneurism? It is in a position not uncommon in aneurisms of the common carotid, with a tendency to pouch forward. Aneurism is, I think, excluded, first, by the total absence of pulsation. Of course we know that we may have a sac that will go on steadily increasing in size until it shall burst, but with so small an opening connecting it with the artery as that the tumor may not only not pulsate, but will even have scarcely perceptible if any *bruit*. If our case here however, were one of aneurism, we would have other signs as of pressure upon surrounding parts—more especially the nerves, giving rise not only to pain, but also to interference with the peculiar functions of those nerves—of more or less interference with return flow of blood from the brain, and we would most certainly have had a shorter history; in other words the case would have ended before this. Again age is against such a diagnosis—the average age of patients suffering from aneurism being, as you know, 45.

Can this tumor be such an one as some of you saw me excise last October from nearly this position, and which had been growing eleven years? No, for the history told us that this lump had commenced to grow near the angle of the jaw, that as it grew it had slipped downwards and forward. It was thoroughly movable, and it did not follow the movements of the trachea and larynx in deglutition.

I am now thrown upon the supposition that we have here to deal with a goitre or enlarged thyroid gland which has become cystic, and I will give my reasons for the diagnosis.

First, a clear account of the original site at which it happened, in front of or very slightly to the side of the wind-pipe; secondly, this tumor moves up and down as deglutition is performed. The only normal growth situated in this immediate neighborhood, and which, closely adherent through the deep fascia of the neck with the trachea, must follow the movements of the latter and of its continuation, the larynx, is the thyroid gland. Third, in the colored race the tendency to fibroid growths (as witness the false keloid so often found in them after burns or wounds) has long been recognized by those who have had much to do with them, and one of the commonest forms of goitre, perhaps, that we meet with in the aged is that known as the *fibrous* goitre, consisting almost entirely of proliferated connective tissue. Fourth, this man lived 78 years of his life in a county proverbial for its hard water. Now, while the pathology of this condition of goitrous swelling is not clearly made out, still it is a fact, and one that has strongly impressed the majority of observers, that in by far the larger number of these people, lime water has been the only kind they had to drink. Now the Derbyshire folk, the cretin of the Alps and our old friend here have, that far, been placed under the same conditions. Therefore, to sum up rapidly, I call this a case of goitre because it commenced exactly in the normal position of the thyroid gland, because it follows the movements of the larynx, because it has been so slow and painless in its growth, and, to an extent at least, because of the quality of water drank.

A few more words and I am done. Why has this tumor become painful and grown so rapidly in the last six months, and what shall be the treatment? The swelling is painful because it is growing, and the growth is probably due to cystic degeneration. It is well known that growths where

this process of cystic softening does take place do grow rapidly, and that when such contents are let out, again rapidly fill.

In reference to the treatment. However benignant or innocent this swelling has been for nearly fifteen years, it now, to all intents and purposes, has marks of distinct malignancy—pain and rapid growth, which, continuing, will eventually destroy life by pressure or exhaustion. The treatment therefore would be to get rid of the growth. But is the play worth the *candle*. Here is a man who has passed his four score years, blind and helpless, who, in the natural course must soon “round life’s fitful fever.” The arteries in the forearm distinctly beaded, with a tumor, which upon the left side seems to lie directly upon the carotid or at any rate is firmly and deeply attached. Is it worth while to run the immediate risk to life always present in the operation of extirpation of the thyroid gland, of secondary hemorrhage from brittle and non-holding arteries, and is the difficulty of deglutition and breathing sufficient to warrant interference? I think not and shall therefore decline to do anything further than suggest a *placebo* in the shape of an iodide of potass. ointment.

LORD BEACONSFIELD was attended during his recent illness by Dr. Kidd, an eclectic practitioner. Dr. Quain, a regular, was called in to consult, but before consenting to see the case received assurance from Dr. Kidd that he was not treating the Earl homœopathically, and that every direction and prescription would be carried out. For this act in consulting with an eclectic Dr. Quain has been called upon to defend himself before the College of Physicians of London. Sir Wm. Jenner absolutely refused to consult with Dr. Kidd before Dr. Quain was called upon.

SOCIETY REPORTS.

EIGHTY-THIRD ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

(Held in Hopkins Hall, April 12th, 13th, 14th, 15th and 16th.)

The Eighty-third Annual Meeting of the Medical and Chirurgical Faculty of the State of Maryland, convened in the Hopkins Hall, Johns Hopkins University in this city, on Tuesday, April 12th, at 12 o'clock M. The meeting was called to order by the President, Dr. H. P. C. Wilson, and opened with prayer by Rev. W. U. Murkland. The minutes of previous meetings were read by the Secretary, Dr. W. G. Regester. There was a large attendance of city physicians. The following delegates reported: Dr. Theodore Cook, Baltimore Medical Association; Drs. W. Stump Forwood and H. Clay Whiteford, Medical Society of Harford County; Drs. E. B. Price and J. W. S. Jordan, Baltimore Medical Association; Drs. J. W. C. Cuddy, C. S. Parker and E. M. Reid, Medical and Surgical Society of Baltimore.

The President, Dr. H. P. C. Wilson then read his annual address. He began with a brief reference to his professional work and the trials of the young physician in the practice of his profession. He referred to the honor he felt in being the presiding officer of this Faculty, which from time to time had embraced among its membership the best talent of the profession in the State. He argued as to the importance of advancing the interests and influence of the Faculty, and urged that every physician in good standing in the State should become a member of this body. The various local medical societies in the State were urged to bring annually to the Faculty reports of their work and to send delegates to its meetings. The value of the local medical Societies to the profession was pointed out, and the importance of encouraging these organizations fully insisted upon. The library of the Faculty was the topic next spoken of. A library of choice periodical literature of recent publication was urged as a great necessity and desideratum. The present

library was deficient in many respects, and greatly needs the liberality and attention of the profession. This library had improved, and would continue to improve if the proper spirit of liberality was extended to it. He remarked, "if the Faculty had a fire proof library building there were several members who would, at their death, donate their private libraries to the Faculty." He advised that a joint-stock library company be formed, and that each member should take a few shares. These funds could be invested, and when a sufficient sum was realized by other means, the building could be erected. Reference was next made to the claims of the profession in this city and State upon the Peabody Institute for a medical part in its great library. The founder of this charity, designed that every class of citizens should be represented, yet strange to relate that in this great library containing over 60,000 volumes of rare value upon every subject, it was not represented in a medical literature of any value whatever. This was a mere oversight upon the part of the Trustees. Proper influence brought to bear would place at the command of the medical profession the same facilities accorded to other scientific and literary interests.

In closing his address, the President made the following recommendations which at a subsequent session were presented in the form of resolutions and adopted. First, that two weeks before each annual meeting an advertisement announcing the date, place and time of each meeting be inserted in a paper of each city or town in the State. Second, that at each annual meeting a committee of five members be appointed as a reception committee to provide for the comforts of those coming as delegates to the meeting from other parts of the State. Third, that a permanent committee of five, to be known as the library committee, be appointed to provide for a fire-proof library building. Fourth, that a committee of five be appointed to lay the claims of the Faculty, and the claims of the whole profession throughout the State before the Trustees of the Peabody Institute, urging that a portion of this library be set apart for medical works.

REPORTS OF OFFICERS.

After the reading of the President's address, the reports of officers were called for and read.

The Corresponding Secretary, Dr. J. E. Michael, read a brief report giving an account of his work for the year, and calling attention to the difficulties of reaching members of the profession in the counties through lack of a proper medical register. The Treasurer, Dr. Judson Gilman, submitted his report showing the financial condition of the Faculty. The assets of the Faculty were largely diminished by the sale of the house on Courtland Street at a sacrifice. It was heretofore reported among the assets of the Faculty at its cost of \$5,700, but being forced into market brought a net return of \$503.50. The assets of the Faculty had been increased by an estimated value of \$1,000 added to the library. The total expenses for the year were \$1,380.46; total receipts \$1,854.84; balance cash in hand \$474.38.

The Board of Examiners for the Western Shore nominated for membership the names of twenty-one candidates, who were subsequently elected members. Prof. Wm. Goodell, of Philadelphia, and Prof. John W. Mallet, of the University of Virginia, were proposed as honorary members and subsequently elected.

The Library Committee, through its Chairman, Dr. I. E. Atkinson, made a full and carefully compiled report showing the condition of the library to be much improved over former years. Great interest has been aroused in behalf of the library during the year. The number of volumes had been increased during the year by 520 works, many of them of very rare value. One hundred medical journals are kept on file at the library—eighty American journals and twenty from France, Germany and England. There have been presented to the library portraits of Prof. Nathan Smith, father of the late Prof. N. R. Smith, of this city, Drs. J. Marion Sims, L. A. Sayre, Oliver W. Holmes and others.

Bound volumes of the Transactions of the Faculty, from its organization, in 1799, to 1879, were exhibited. The

body first met on the first Monday in June, 1799.

The Committees on Publication, Memoirs and Ethics made brief reports.

The Curator, Dr. Randolph Winslow, announced that the specimens left to the Faculty by Dr. Geo. C. M. Roberts were in bad condition from want of proper attention. Some of these specimens were of great interest and value, and were worthy of greater care and attention. He urged the importance of an anatomical museum for the collection and preservation of suitable pathological and anatomical curiosities.

REPORTS OF SECTIONS.

Section on Surgery.—After the reports of officers had been read and suitable action taken in reference to them, the report of the Section on Surgery was called for. This report was made through Dr. Oscar J. Coskery, Chairman. He remarked that, guided by a rule adopted at a former meeting of this body, he had confined his report to the interesting surgical operations performed, and appliances introduced or extended within the last year by members of the profession in this State and city. Reference was first made to an amputation at the hip-joint by Dr. G. G. Rusk. The patient left the hospital well at the end of the third week. Dr. Coskery had again performed a double amputation of both legs, at one sitting, upon a boy, and of right leg and of anterior third of left foot, in sister of same boy, for frost bite. Both cases were successful.

Last October Dr. Coskery had removed a large tumor, nearly as large as a man's head, from the neck of a young colored man. This tumor made its appearance twelve years ago. It occupied a position in front of and to the right side of the trachea. It was superficial, hard, knobbed, painless and freely movable from side to side. Under chloroform it was carefully turned out of its capsule. Twenty-two ligatures were put on, and the black heat actual cautery and styptic colloid freely used. Hemorrhage was completely averted by tying two more vessels under the chin, which sprang a leak two hours after the operation. No sutures were used to close the

flaps in anticipation of hemorrhage. The sheath of the carotid, with the origin of the facial artery, were bared during the operation. The patient left the hospital on the twenty-first day entirely cured. The tumor was a fibro-adeno-enchondroma and weighed three pounds ten ounces. Reference was next made to a case of strangulated hernia in a young married woman, which presented some points of interest. Dr. Coskery next exhibited a case of a very peculiar injury to the skull which illustrated the advisability of non-interference unless symptoms demand it. The patient, a sailor, was struck with a large, heavy piece of wood and knocked insensible, and remained so about an hour. When first examined by Assistant Surgeon Goldsborough, at St. Joseph's Hospital, the forehead and right eyelid were so much swollen that no positive diagnosis of the amount of skull implication could be made out, but no positive cerebral symptoms were observed. As the swelling subsided it was found that a portion of the right half of the frontal bone, measuring nearly $1\frac{1}{2}$ to 2 inches, was depressed a quarter of an inch below the general surface of the bone, and that about one inch square of the left half of the frontal was loose and had come forward to nearly as great an extent as the first piece was depressed. The patient did perfectly well throughout.

Attention was called to the exceedingly light and easily adjusted apparatus introduced by Prof. Dugas, of Georgia, for fracture of the clavicle. Eight cases treated during the past eight months with this method yielded very good results. The lightness of the apparatus, which consists simply of a triangular piece of cotton and two bandages, is a great advantage.

Dr. Coskery referred to forty cases of stricture of the urethra treated during the past year by Prof. C. F. Bevan by the Otis method. In these forty cases ninety-three contractions were divided, seventy-five per cent. of which were located in the anterior four inches of the urethra. The average calibre of the urethra was found to be 30 m. m. F. The relationship between the calibre of the urethra and the circumference of the penis is borne out by the measurements made.

Dr. Coskery again called attention to the modification of the plaster of Paris apparatus described at the last meeting of the Faculty. Since then he had used it upon upwards of twenty-five fractures of the leg and nine of the thigh. The result has been good in all cases. This splint possesses the advantage of being lighter than any other plaster apparatus. Dr. Coskery does not claim originality for the idea of "plaster of Paris splints." That honor belongs to Mr. John Croft, of St. Thomas' Hospital, London. Mr. Croft, however, uses thick flannel worked in plaster, while Dr. Coskery uses so much lighter and thinner material.

SECTION ON MATERIA MEDICA.

The report from this section was read by Dr. A. Atkinson. Attention was directed first to *Crude Petroleum*, the unrefined product from the accumulations on the iron tubes in Pennsylvania and West Virginia. This drug has been found useful in nearly all pulmonary troubles, especially in the cough of phthisis. Its repulsive taste can be improved by making into mass and giving in pill form, as, preferably with Dover's powder or pulv. cubebs, or both combined. In asthma it offers relief. In the oil regions the workers resort to it in all sorts of cough, and without regard to the stage of the trouble. The crude article is a chocolate colored mass, with odor of coal oil. Crude petroleum taken in too large doses is apt to cause nausea, with unpleasant eructations. Dr. Atkinson related one case of profound stupor following the swallowing of two ounces of coal oil. The patient was a child 4 years of age. Consciousness returned after two hours, and no bad symptoms followed. Cold douches to the spine and head were resorted to during the stage of stupor, and olive oil freely given. Dr. Atkinson had known intense redness, almost erysipelatous to follow the local application of coal oil employed in rheumatism.

Chian Turpentine was next considered. This remedy introduced by Dr. Clay, of Manchester, England, as a remedy for cancer of the uterus has not sustained the good reputation given to it. A pure article is difficult to obtain. It is more than probable it will fall into disre-

pute as condurango, the cancer plant, did a few years ago. Chian turpentine should come from the island of Chio, in the Archipelago. The samples should be of a greenish color, very slightly bitter to the taste, and soon harden into brittle resin.

Chaulmoogra Oil has gained some reputation in treatment of leprosy and other skin affections. It has disappointed many of the English medical officers stationed in Bombay.

Iodoform was next considered, and its action on mucous surfaces as a specific in urethritis, chancroids and ulcers generally fully pointed out.

Cascara Amarga or Honduras Bark has gained some reputation because of its appetizing and probably alterative powers. In some chronic skin diseases it has been followed by good results and it is claimed that in constitutional syphilis it exerts a curative effect. Its action is slow, and it is advisable to continue the drug as long as the patient can be induced to take it.

Dr. Atkinson called attention to the *Iodide of Starch* as a general antidote for many poisons.

Dried Blood of the Bullock is prepared so as to retain the albumen and other nutritious products of the fluid. It perhaps answers a better purpose than the warm blood so much sought after at the Abattoirs of Paris, by consumptives. With glycerine and cognac brandy it forms a pure agent for the speedy resupply of blood after hemorrhages, and answers well in marasmus of little children or in chlorotic females without appetite.

Attention was called to the use of *Salicylate of Sodium* in severe cases of purulent cystitis after the benzoic acid had failed to afford relief. No good was experienced until the head became affected by the salt. Its noted power of preserving the purity of the water and preventing decomposition were well attested.

After calling attention at some length to *diuretics, to the acid phosphates, nitr-glycerine, mono-bromide of camphor and sclerotic acid*, Dr. Atkinson referred to the value of *boracic acid* as an agent in the treatment of inflammations of mucous membranes and to its specific action

in urethritis, to which attention was first directed by Dr. J. Shelton Hill, of this city.

This report on *materia medica* was quite extended and we have been able only to give a mere outline as indicating rather the subjects presented and not a statement of facts or conclusions.

SECOND DAY'S SESSION.

The Faculty was called to order by the President at 12 M. and the minutes of yesterday's session read and approved. The President announced that Prof. H. Newell Martin, of the biological department of the Johns Hopkins University, would, at the invitation of the Executive Committee, deliver a lecture "*On a Method of Isolating a Mammalian Heart.*" We have copied from "*Notes From the Biological Laboratory,*" of the Johns Hopkins University, the following summary of Prof. Martin's lecture:

"To obtain a mammalian heart isolated from the rest of the body and keep it alive for a time sufficient to allow the examination of the effect of various conditions upon its activity has long been a physiological desideratum. The frog's heart has for years been the subject of minute study but hitherto the mammalian heart has been a baffling object. It seems to have been forgotten that while the frog's heart is a spongy structure having no arteries of its own, the mammalian heart is a dense organ dependent for its life on a continuous blood flow in its capillaries; and all attempts hitherto made, so far as I know, have been efforts to apply to the mammal the methods found successful with the frog, with merely the addition of arrangements adapted to keep up the comparatively high temperature at which the mammalian heart normally beats. By working in another way I have recently succeeded in keeping the mammalian heart alive for more than an hour, and beating with perfect rhythm and normal force; the organ is thus made almost as available for study as the heart of the frog. The method adopted is as follows: The animal having been narcotised and the chest opened, the aorta is tied just beyond its arch; then the trunk which, in the cat, gives origin to the right subclavian and the two common carotids, is ligatured close to its origin, and a canula put in

the left subclavian: finally, the inferior and superior venæ cavæ and the azygos vein, and the root of one lung are tied.

Artificial respiration is of course started so soon as the thorax is opened, and kept up henceforth. The course of the circulation is thus:—left auricle, left ventricle, commencement of aorta, (and along the left subclavian to the canula which is connected with a manometer), coronary system, right auricle, right ventricle, pulmonary vessels of one lung, and then back to the left auricle; in other words, the only section of the systemic circulation left is that through the vessels of the heart itself. Since the physiological actions taking place in the lung are among the best known of all occurring in the body, they may be eliminated, and we have practically an isolated and well-working living mammalian heart for study. The nerves going to the heart may be divided if desired, but that is hardly necessary as the want of blood-flow in the nerve centres of the body incapacitates them after a very short time, and they no longer are capable of exerting any influence on the heart. It is possible, however, that changes in the lung vessels may affect the results of experiments made on the heart's work under different conditions, (*e. g.* when defibrinated blood is sent into it from a vein under various pressures, or when drugs are administered to it), and an investigation of the nerves, if any, governing the lung vessels must be undertaken as a preliminary to a further study of the direct action of various conditions on the heart's work."

After the conclusion of Prof. Martin's lecture the President introduced Dr. W. T. Sedgwick, of the University, who gave an instructive lecture on "*The Study of Blood Pressure in the Coronary Arteries of the Heart*."*. He began by stating that the great anatomist Thebesius, (*Diss. med. inaug. de circ. sang. in corde, 1708*), propounded the theory that the flaps of the semilunar valve of the aorta are pressed against the wall of that vessel during the systole of the heart, and occlude the mouths of the coronary arteries which lie behind them. This view fell into oblivion until it was revived

and powerfully supported in recent times by Brücke. The reasoning of the latter is largely teleological; since the heart is a hollow structure which diminishes its bulk, and, so far as the ventricles are concerned, obliterates its cavity in contraction, he points out that a forcible injection of the heart arteries with blood during the systole of the organ, would tend to make its walls tense and oppose the contraction; while if the coronary arteries received no blood during the ventricular systole but were filled with it during the diastole, the contraction of the heart would not be impeded and its subsequent dilatation would be promoted. Arguing from the general mechanical perfection found in the mammalian body, he concluded that it was probable that the view of Thebesius was correct, and that the semilunar valve flaps were really so placed during the ventricular systole as to prevent blood from entering the proper cardiac arteries, while in diastole the organ had its walls tensely filled with blood and its cavities consequently expanded.

The experimental evidence for and against this view cannot be discussed in this brief article; it will suffice to state that prominent physiologists have been hitherto divided on the question, and experiments and anatomical observations have been published on each side; the result being a general belief that the question could only be definitely settled by an observation of arterial pressure in the coronary vessels; if the coronary pulse coincided with that in other arteries Brücke would be wrong; if it alternated with it, he would be right. The difficulty of introducing a canula into the arteries of the living beating heart, seems hitherto to have foiled physiological experimentors, and we undertook the task without any very great hopes of success, but induced by the many important points in the physiology of the mammalian heart and the mechanism of the circulation, which would be rendered available for study should we succeed.

Our experiments were made on dogs, placed very completely under the influence of morphia; after a considerable number of failures we have succeeded in getting on seven or eight animals

*Notes from Biological Laboratory.

simultaneous graphic records of mean arterial pressure and pulse beats in the carotid and coronary arteries. The results of a careful examination of these are—

1. The blood pressure in the coronary arteries is comparatively very great, being in a small branch very little less than equal to or greater than that in the carotid trunk.

2. The coronary and carotid pulses are practically synchronous in time; there is no trace whatever of an alternation in them. This holds true whether the arterial pressure be high or low, or the heart's rhythm slow or quick; and every minutest feature of the graphic record in the tracing of blood pressure in the carotid is simultaneously and perfectly repeated in that obtained from the coronary artery. Whether the heart's beat be slowed by stimulation of the cardio-inhibitory nerves, or arterial pressure be greatly raised by inducing dyspnoea, the general and sphygmie variations of pressure in the two arteries are perfectly synchronous and similar in form: the record traced from each artery is in its variations an exact duplicate of that obtained from the other.

The results of these experiments prove that for the dog the Thebesius-Brücke view (with a predilection in whose favor we started) is untenable; although the ventricular systole might be conceived to raise pressure in the coronary artery, it is inconceivable that every minute character of the carotid tracing should be synchronously and perfectly reproduced in that from the coronary artery unless both were due to the same immediate cause, viz: the elevation of arterial pressure in the aorta by the systole of the left ventricle; the mouths of the coronary arteries are therefore not closed by the flaps of the semilunar valve during ventricular systole.

We are now engaged in an examination of the results of stimulation of the accelerator nerves upon the mean pressure in the coronary artery, with the hope of discovering whether these puzzling nerves are not the vasomotor branches controlling the cardiac arteries, but our results on this point are not ready for publication.

A full account of the experiments on which the above statements are based, with reproductions of the tracings obtained, will shortly be published in the *Journal of Physiology*.

[To be Continued.]

REVIEWS & BOOK NOTICES.

Drugs that Enslave. The Opium, Morphine, Chloral and Hashisch Habits.

By H. H. KANE, M. D., New York City. Presley Blakiston, Publisher, Phila., 1881. Price \$1.50. Pp. 221.

The idea of writing this little work was first suggested to the author by the numerous letters received from physicians at home and abroad, asking for information on various points connected with the symptomatology, prognosis and treatment of the various "habits." With a view of answering these inquiries Dr. Kane has collected a valuable number of facts which he has presented in this volume in a comprehensive yet concise form. The manner of formation and general symptoms of these "habits," together with prevention and treatment, are carefully considered. The following conclusions have been reached: 1st. The abuse or habitual use of narcotics is steadily on the increase, especially the subcutaneous use of morphine. Two classes especially are blamable for this—the physicians and druggists. 2d. The deaths and dangerous accidents and the spread of the continued use of narcotics, is due to a great extent to the druggists who, in many cases, sell the drug without a physician's prescription, and without any reasonable excuse on the part of the patient in direct violation of the law.

This little volume contains a good amount of useful information and should be very generally read by the profession. It is to be hoped that the warnings which Dr. Kane has so clearly pointed out in reference to the

careless habit of prescribing narcotics by physicians will be considered. In the use of such drugs as opium and chloral the physician should carefully reflect upon the habits which their employment may provoke. The profession is again indebted to Dr. Kane for faithful efforts in presenting the evil effects of "drugs that enslave."

A Text-Book of Human Physiology.

By AUSTIN FLINT, JR., M. D., Prof. of Physiology and Physiological Anatomy in the Bellevue Hospital Medical College, etc., etc. Third edition; revised and corrected. D. Appleton & Co., 1881. Price \$6.00. Pp. 947.

Former editions of this work are quite well known to the profession, and are extensively used as text-books. The favorable reception of these editions has encouraged the author to spare no pains in the revision of this third edition, which has not only been rewritten but carefully corrected and altered to bring it fully in accord with the existing state of physiological knowledge. The work is very formidable in size and contains very much more matter than is required for the student or practitioner of medicine. But as it designed to represent the present scope of physiological knowledge it is doubtful whether omissions could have been made without impairing its value as a scientific treatise. As a book of reference it certainly will hold a high position.

In this edition the author has adopted the views of Bowman, lately confirmed by Heidenhain and others, with regard to the functions of the malpighian bodies of the kidneys. The section upon Animal Heat gives an account of the author's new views upon this subject, published in 1879, showing the probable generation of heat in the body by the union of oxygen and hydrogen and the formation of water. The chapters upon the "Organs and Elements of Generation" and on

"Fecundation and Development of the Ovum" contain the most recent views upon these subjects and present a very full and clear statement of existing knowledge. The volume is illustrated by three lithographic plates and three hundred and fifteen woodcuts. Its richness in this respect makes it additionally valuable as a text-book upon "Physiology."

The Student's Manual of Histology.

By CHAS. H. STOWELL, M. D., Assistant Professor of Physiology and Histology and the Instructor in the Physiological Laboratory of the University of Michigan. Geo. S. Davis, Publisher, Detroit, Mich. 1881. Pp. 279.

This volume has been prepared for the use of students, practitioners and microscopists. It is not intended to take the place of the larger text-books upon this subject. The author has attempted to give a practical and condensed description without injury to completeness or accuracy. The volume will prove useful to beginners or to those whose time does not admit of large histological study. It is fully illustrated and handsomely printed.

The Principles and Methods of Therapeutics.

By ADOLPH GUBLER, M. D., Professor of Therapeutics in the Faculty of Medicine, Paris. Translated from the French. D. G. Brinton, Phila., 1881. Pp. 435.

This book differs from other treatises in the language on therapeutics, to the extent that it discusses the *principles* and *methods* of therapeutics. It has little to say in reference to the physiological action of drugs and to the treatment of individual diseases. The author has aimed to represent the methods which can be most effectively employed in the administration of remedial agents and the processes by which their remedial action is exerted on the human economy. It is a study founded on clinical,

energy and enthusiasm in undertakings looking to the advancement of medical progress. Under the new arrangement it is confidently believed the JOURNAL will enhance in interest and value. No labor will be spared to enlarge its scope and scientific bearing, to perfect its typography and style, or to keep its pages well supplied with choice original and selected matter.

MISCELLANY.

SHORTCOMINGS OF UTERINE PATHOLOGY.—Nothing more retards the progress of gynæcology, lowers it as a special study in the eyes of its sister departments, and fans the dying flame of a prejudice, with which it has been successfully able to contend only during the past half century, than the unsettled state of uterine pathology. In general medicine, in surgery, and in all other special departments, the study of pathology is made the keystone of the arch that supports them; and observers seem willing to agree as to fixed principles concerning it. In gynæcology the whole subject presents the melancholy aspect of uncertainty and dissension. Many of its votaries, instead of taking broad and strong views, become the partisans of some special dogma or theory, which is warmly attacked by others, who hold some view equally narrow, incomprehensible and exclusive.—*Last Edition of T. Gaillard Thomas's Diseases of Women.*

CRIMINALITY OF COMMUNICATION OF SYPHILIS.—But I wish, at this early time, to put in a plea for another prophylaxis, the legislative protection from syphilis, especially of women about to be married and of doctors. It is not rare to meet with instances of carelessness on the part of bridegrooms so gross as to merit the imputation of criminality; innocent women being, as a result, infected with syphilis, and thereby killed or maimed for life, and their offspring in a like terri-

ble plight. No doubt such tragedies are sometimes enacted in spite of due care on the part of the husband; but many are the result of culpable thoughtlessness or culpable neglect. Again, in my own medical circle, I have lost, through accidental surgical infection with syphilis, several medical brethren whose lives were very valuable. One of them, an accoucheur, did not survive attendance on a syphilitic lying-in woman above a year and a half.

Now, it appears to me that such proceedings as the marriage of a man who knows he has recent and active syphilitic disease, should be taken cognizance of by the law, and regarded as a crime not much less grave than manslaughter, and the same is true of such proceedings as that of a lying-in woman, who, knowing she has syphilitic sores on her pudendum, fails to warn her accoucheur of the circumstance. Disease and death, coming in this deliberately careless way, surely involve not less horrible and heinous criminality than any other offense.—*J. Matthews Duncan's address before Obstet. Soc. of London.—Lancet, March 5th.*

In an address before the N. Y. Academy of Medicine, Dr. Fordyce Barker said, "that he doubted whether in any former age the medical profession had been held in so high esteem, and whether in any other city in the world it held so high a position socially or was on the whole better remunerated for its labor than in New York. Many of our wealthy people do not content themselves by paying bills sent them but often send a generous honorarium."

TARWATER IN OBSTETRICAL AND GYNECOLOGICAL PRACTICE.—This preparation is made, according to the United States Dispensatory, by adding one pint of wood tar to four pints of cold water, mixing thoroughly and shaking frequently during twenty-four hours,

and then filtering the infusion. Internally administered it is stimulative and diuretic in its action; locally applied it is slightly astringent, unirritative and alterative; it is also antiseptic and disinfectant. Dr. J. F. Allen, of Augusta, Ga., recommends the tar water as a vaginal wash during the lying-in period, and for local application in the treatment of certain diseases of the vulva, vagina and bladder, and as an antiseptic and disinfectant after gynecological surgery. He claims that it will destroy germs and arrest or restrain the process of supuration. It is especially useful in puerperal-septic diseases. Tar water may be easily obtained, and its cheapness places it within the reach of the poorest people. The remedy is worthy of careful trial.

The New York Medical Record suggests four ways by which the doctors can get more money, viz: "by stealing it, borrowing it, earning it, marrying it. The code of ethics, mosaic and medical, cuts off the first: various accidents, personal, geographical, etc., generally prevent the application of the last method; plan number three has long proved a failure. We advise the medical man who wants more money therefore, by all means borrow it, and pay up by treating the creditor."

VIRGINIA MEDICAL MONTHLY.—During the session of the American Medical Association, which will be held in Richmond during the first week in May, Dr. L. B. Edwards will issue a *daily edition* of the *Virginia Medical Monthly*, giving full reports of the Proceedings of the General Sessions and of the several Sections as well as the Proceedings of other associations that convene at the same time and place, such as the association of medical colleges, etc. The four daily issues (Wednesday, Thursday, Friday and Saturday,) will be mailed to any address in the United States on receipt of forty cents, or ten cents a

copy; to any address in Europe for fifty cents.

The advantages of this *daily edition*, made up from the reports of competent stenographers, are obvious to the reading medical public. Orders, *with the cash*, should be sent in advance of the session addressed to Dr. Edwards, at Richmond, Va.

EXTRA-UTERINE PREGNANCY.—Dr. A. F. Erich, of this city, on April 5th, at the College of Physicians and Surgeons, delivered a dead fœtus through the abdominal wall in a case of extra-uterine pregnancy. The patient, a negro woman, aged about 30 years, reached full term in August last. The child perished about that time. Ulceration, involving the umbilicus, took place, and the decomposed fœtus presented through an opening in the abdomen through which it was easily removed. The case is one of much interest and we hope to publish a full history at another time.

TREATMENT OF ANÆMIA.—After referring to hygienic and dietetic measures, the hæmatinic drugs were considered, and the rapidity with which iron acts in restoring the corpuscular richness was illustrated. Arsenic ranks next to iron as a hæmatinic, and in some cases is more efficacious. Phosphorus had been given by Dr. Broadbent with marked effect in a case of idiopathic progressive anæmia. Manganese had been found wanting and had fallen into disuse. Inhalation of oxygen does not increase the corpuscular richness, although increasing appetite and the power of assimilation (Hayem). Valuable as adjuvants are quinine, strychnine, the mineral acids. Transfusion is the last resort in the pernicious forms of anæmia, and a few successful cases have been recorded by Quincke; but its employment must be had recourse to before the disease is too far advanced, if any permanent effect is to be hoped for. The alternative method of the admin-

istration of enemata of defibrinated blood, advocated by the Therapeutical Society of New York, and introduced to the notice of the profession in this country by Dr. Sansom, deserves a careful trial.—*Gulstonian Lectures on Anæmia*, by Sidney Coupland, M. D., F. R. C. P. *Med. Times and Gazette*, April 9th, 1881.

STATISTICS regarding the practice of medicine by women show that of 276 who have graduated in the past 30 years 151 are now practising. The incomes of 24 were between \$1,000 and \$2,000; of 20, between 2,000 and \$3,000; of 10, between \$4,000 and \$5,000; 3 between \$5,000 and \$15,000; of 4, between \$15,000 and \$20,000. The average income was \$3,000.

COMPULSORY VACCINATION IN FRANCE.—The following are the conclusions of the committee appointed by the Académie de Médecine upon this subject: 1. Vaccination, with extremely rare exceptions, is an inoffensive operation when practised with care and on a subject in good health. 2. Without vaccination, hygienic measures (isolation, disinfection, &c.) are of themselves insufficient for preservation from small-pox. 3. The belief in the danger of vaccinating or revaccinating during the prevalence of an epidemic is without any justification. 4. Revaccination, the necessary complement of vaccination for assuring immunity against variola, should be practiced ten years at least after a successful vaccination, and repeated as often as possible, when it has not been followed by the characteristic cicatrices. 5. The Academy is of opinion that it is urgent and of high public interest that a law should be passed rendering vaccination obligatory. 6. As to revaccination, it should be encouraged in every possible manner, and even imposed by administrative regulations under all circumstances where this is possible. — *Gazette des Hospitaux*, March 31st, 1881.

ON TO RICHMOND.—Between thirty and forty members of the profession in this city have expressed the purpose of attending the meeting of the American Medical Association, to be held in Richmond, Va., beginning May 2nd. This will be the largest delegation which has ever attended any meeting of this association held outside of the city limits.

Round trip tickets over the B. & P. road will be issued, good for ten days, for nine dollars. Board can be secured at the best hotels in Richmond for from \$2.50 to \$3 00 per diem. The occasion promises to be one of noted interest, and it is hoped that all who can will make an extra effort to attend the meeting.

FACULTY APPOINTMENT.—Dr. Geo. H. Rohé, of this city, has been elected Clinical Professor of Dermatology in the College of Physicians and Surgeons, Baltimore. Dr. Rohé has devoted special attention to this branch of medicine for some years past, and is well known for his contributions to dermatological literature. He is a young physician of decided energy and ability and will no doubt ably discharge the duties of the position to which he has been called.

VESICO-VAGINAL FISTULA TREATED BY THE FORMATION OF A RECTO-VAGINAL FISTULA AND CLOSURE OF THE VAGINA.—Complete occlusion of the vagina has long been looked upon as the *dernier ressort* in cases of vesico-vaginal fistula in which, either from their size or the unhealthiness of the tissues bounding them, restoration of the vaginal wall to its integrity seemed hopeless. But the data from which to judge as to the effect of the urine upon parts not adapted to contain it, and as to what is the way to get the best artificial reservoir, are as yet scanty. A case by Dr. Géza Antal, published in the *Archiv. für Gynakologie*, gives us some information on this head.

His case was one in which the loss of tissue was so great that closure of the fistula was thought out of the question. His first thought was to close the vagina in its lower third, letting the urine and menstrual fluid be passed per urethram. But repeated operations for this purpose all ended in failure. Then it occurred to him to unite the labia, first making a recto-vaginal fistula, thus making the rectum a common cloaca, and trusting to the rectal sphincter to retain both kinds of excreta. This he did. While the patient was under surgical treatment the bladder was washed out with $\frac{1}{2}$ per cent. solution of carbolic acid. The operation was successful. The result has been that the patient now passes urine per rectum at intervals of from two to two and a half hours. During these intervals she does not complain of any discomfort. Menstruation is regular, the blood escaping without hindrance. Several months after the operation no change could be discovered with the speculum in the rectal mucous membrane.

The favorable results above described lasted, when the author wrote, for seven months after the operation. —*Med. Times and Gazette, March 12.*

ANTISEPTIC IRRIGATION VS. SPRAY.

—The idea that the antiseptic spraying of wounds, so strongly insisted upon by Mr. Lister, is unnecessary, as it certainly is inconvenient and cumbrous, is taking strong root in Germany, which has been perhaps the most enthusiastic recipient of Listerism of any European or other civilized nation. Dr. Von Bruns, in an article entitled "Fort mit dem Spray," quotes statistics to show the spray to be unnecessary and carbolic irrigation a sufficient substitute.

Dr. Johann Mikulicz (*Langenbeck's Archiv. für Klin. Chir.*) details experiments undertaken with a view to settle the question.

He shows that the spray does not

prevent the germ elements from getting into wounds; that germs may gain access to diseased parts through the living organism itself; that the strength of the spray solution is not constant, and that the amount of the carbolic acid conveyed to the atmosphere is generally underrated; that it is mainly by impregnating the tissues and rendering them unfavorable for the development of the germs (which impregnation can equally as well be effected by simple injection with antiseptic fluids) that the spray can be of service; that it requires a complicated apparatus, which must be used with great exactness is expensive, costs much time, is not entirely devoid of danger and requires assistance from others besides the surgeon.

Trendelenburg and others have, by the results of their operations, shown that the spray may safely be dispensed with in practice.—*Med. Times and Gazette, March 5th and 12th.*

(Billroth has also substituted irrigation for the spray with increased success in his operations.—*Bost. Med. Journal, Jan. 20th.*)

ARTIFICIAL TEETH SWALLOWED DURING SLEEP.—At a meeting of the *Odontological Society of Great Britain*, held Feb 7th, Mr. Isador Lyons related a case in which a set of artificial teeth had been swallowed during sleep. The patient woke up choking, and at once went to a physician, who tried to push the teeth into the stomach with a probang, and then gave a dose of castor oil. The patient, not being relieved, went to St. Bartholomew's Hospital, where Mr. Thomas Smith, after ascertaining that the plate was still impacted in the œsophagus, extracted it after some trouble, with forceps.—*Med. Times and Gazette, March 5th.*

EXCISION OF PYLORUS FOR CANCER.—Prof. Billroth performed this operation January 29th. Seventy years ago Merrem showed by experiments on

dogs that the operation was feasible and recommended it in cancer. It was done in man by Péan, of Paris, but with a fatal result on the fourth day.

Billroth's patient was a woman, aged 43, who had suffered since Oct., 1880, with constant vomiting, emaciation, movable tumor in site of pylorus, &c. The stomach was first washed out and chloroform administered. An incision about three inches long was made over the tumor, which occupied more than the lower third of the stomach. The vessels were tied before their division. The tumor was drawn out of the wound and cut away from the duodenum and stomach by incision made to correspond to each other and running about $\frac{1}{2}$ inch outside the infiltration. The duodenum and stomach were then united by carbolized silk sutures, the parts cleansed and returned to the abdomen.

The patient was under chloroform one hour and a half. A quill could only be passed with difficulty through the pylorus. The organ was not changed in shape but only rendered smaller. There was no pain nor vomiting afterwards. February 13th the patient was doing well and seemed assured.—*Weiner Med. Woch.*—*Med. Times and Gazette*, March 5th.

SOCIETY BULLETIN.—*Medical and Surgical Faculty of Maryland*—The Section on Obstetrics and Gynecology will hold monthly public meetings on the fourth Friday of each month. Friday, May 27. Dr. Ashby will report a "case of Extra-Uterine Pregnancy."

Medical Association will meet Monday, May 9th, at 8 P. M. Dr. Scarff will open the discussion on "Treatment of Croup."

Medical and Surgical Society meets every Wednesday at 8:30 P. M.

Clinical Society of Maryland will meet Friday, May 6th, at 8 P. M. May 20th, Dr. Miles will read a paper.

The Academy of Medicine will meet Tuesday, May 3rd, at 8:30 P. M.

MEDICAL ITEMS.

THE Colorado Legislature has passed a bill to "protect the public health and regulate the practice of medicine in that State."—A correspondent of the *Med. and Surg. Reporter* suggests that one cause of Bellevue's failure was due to the fact that it refused longer to teach graduates of medicine without pay.—The thirty-second annual meeting of the Pennsylvania State Medical Society will be held in the city of Lancaster, on Wednesday, Thursday and Friday, May 11th, 12th and 13th, 1881. —Dr. Grinnell says that the tincture of iodine, in doses of ten to twelve drops in a half glass of sweetened water every eight hours, will never rank second to quinine in the treatment of intermittent fever.—According to Chadwick the life of a gravedigger loses one third of its natural duration, and often sudden death overtakes him from the inhalation of mephitic vapors.—A bill has lately been brought before the New York State Legislature providing that cremation be made legal when at the request of three persons.—The only crematorium in America is the private one of Dr. Le Moine, at Washington, Penna., built in 1877 at a cost of \$1,500. —Ten parts sal ammoniac and ten parts of corrosive sublimate in one hundred parts of water will remove silver nitrate stains from the hands and linen without damage.—*Amer. Jour. of Phy.*—To speedily terminate chloroform narcosis Dr. Scheiner irritates the nasal mucous membrane by means of a roll of paper either simple or dipped in ammonia.—Of eighty cases of cerebral abscess recorded by Lebert twenty were due to otorrhœa; in Schott's forty cases otorrhœa occurred thirteen times; of Meyer's eighty-six cases twenty caused otorrhœa.—The International Medical Congress meets in London in August. Sir James Paget is to deliver the inaugural address on Wednesday, Aug-

ust 3rd. Dr. Billings, of Washington, will deliver an address on "Medical Literature." Addresses will also be delivered by Prof. Huxley on "The Connection of General Science and Medicine," and by Prof. Volkmann, of Halle, on "Modern Surgery"=A marine hospital will be erected at Memphis during the coming season at a cost of about \$30,000.=The Michigan Legislature has passed a bill providing for supplying dissecting material to medical colleges.=The patient, from whom Prof. Billroth removed a cancer of the pylorus, by excising part of the stomach, is reported to be nearly well. She takes food by the mouth without trouble.=*Punch* thus trifles with serious matters:—

"Says Aaron to Moses,

I have got trichinosis,

Says Moses to Aaron,

'Tis because you pork fare on."

(*Boston Med. and Sur. Jour.*)=A man in Philadelphia having been injured by a street car passing over his limbs, a passing physician's carriage was stopped and the physician, Dr. V. B. Atkinson, Secretary of American Medical Association, made to descend and give an opinion as to treatment. His advice was to send for an ambulance, and have the case taken to a hospital. The man died a few days after, and the widow brought suit against Dr. Atkinson for damages for not yielding more prompt and efficient service to the patient, although no consideration had passed and no special claim for such service shown to exist. The Judge ordered a non-suit to be entered for the plaintiff, but the doctor was subjected to much loss of time and expense.=The Rev. Joseph Cook has gone to England to overthrow the views of Huxley, Tyndall, Foster and other philosophers. He claims to have an accurate knowledge of scientific questions, and to be competent to expose the fallacies of men of science.=Carlisle once rode sixty miles to consult a doctor for

dyspepsia. After six months trial he remarked: "I might as well have ridden sixty miles in the opposite direction, and poured my sorrow into the long hairy ear of the first jackass I came upon as into this medical man, whose name I will not mention."=A total of 303,072 acres are devoted to the cultivation of the olive in France. The total product of this land in oil amounts to \$12,000,000 exclusive of picked olives.=A case of urticaria following the use of salicylate of sodium is reported by Dr. Heinlein.=Nitro-glycerine in doses of one minim of a one per. cent. solution, given every half hour, or doses of three minims thrice daily is recommended by Dr. A. W. M. Robson (*British Med. Journ.*, 1880, Vol. 11, p. 803) as a remedy in acute and chronic Bright's disease, and in the vascular tension of the aged.=Medical students were divided as follows among the three medical schools in New York during the past winter: College of Physicians and Surgeons 555; Bellevue Hospital Medical College 350; University Medical College 750. The previous session Bellevue matriculated 600, a decline of 250, the result of the three term movement recently abandoned. These figures fully explain the cause of this retrograde step.=A bill has been introduced into the French Chamber of Deputies, which provides that a pension shall be awarded to the widow and children of every medical man who shall die in the hospital while treating an epidemic disease=Thirty graduates of Jefferson Medical College were in the regular medical service of the U. S. Army, January 1, 1881.=It is rumored in Philadelphia that a firm has applied for a patent for a process to manufacture quinia from coal tar. What next? =A daily edition of the *Southern Clinic* will be issued during the meeting of the American Medical Association in Richmond, Va. This will be for gratuitous distribution in honor of the occasion.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

URTICARIA.

BY GEORGE H. ROHÉ, M. D.,

Clinical Professor of Dermatology, College of Physicians and Surgeons, Baltimore.

Along hedgerows, by the roadsides and in all sorts of waste places throughout this and other countries, flourish various species of an herbaceous plant popularly known as *the nettle*. Botanically, the plants belong to the genus *urtica*, natural order *urticeæ*. The species most frequently found in the United States are the *urtica dioica*, stinging nettle, and *urtica urens*, burning or dwarf nettle. The stalks and leaves of the two species mentioned are studded with stiff, tubular hairs or prickles, having little vesicles filled with an acrid fluid at their base. This fluid has been found to be free formic acid, probably containing another acrid compound. The flowers of the *urtica dioica* are said to be "small, green, in axillary clusters, of mean aspect, corresponding with the insidious character of the plant."*

If the plant be inadvertently touched, or the surface of the skin be lightly lashed with a sprig of the herb, so that the prickles penetrate the skin, an efflorescence, accompanied by tingling, burning and itching appears. The typical form of this eruption is a broad, flat, slightly elevated papule with a bright red border and a whitish or lighter red centre. This lesion is termed a *wheel*, and is the characteristic feature of the affection which it is purposed to consider in this paper. The wheel is, however, not the only form in which the eruption of urticaria manifests itself, as the efflorescence may be composed in great part, or entirely, of small papules, linear elevations, or considerable tuberosities from the size of a hazlenut to a hen's egg. The size of the lesions clearly depends simply upon the amount of exudation, and perhaps upon a greater or less predisposition in the skin to irritative action of this character. The eruption generally begins with great suddenness, is sometimes accompanied with febrile symptoms, and frequently disappears as suddenly as it came. Itching and burning are

*Wood: Class-Book of Botany, pp. 510.

characteristic symptoms of the eruption. Sometimes the top of one or more of the wheals is occupied by a vesicle. This simply depends upon the increased effusion of serum, and beyond slightly changing the appearance of the eruption has no significance.

Anatomically, the wheal consists of an exudation of serum into the malpighian layer of the epidermis and the upper layers of the corium, with a limited annular hyperemia due to a dilatation of the smaller vessels in the marginal zone of the wheal.

The *causes* of urticaria are both external and internal.

In addition to the irritating influence of the nettle, already mentioned, and which has given to the affection one of its popular names, *nettle rash*, the external, direct or traumatic causes of urticaria are the bites of various insects, as lice, fleas, or bed-bugs, contact with the larvæ of various species of lepidoptera, and in some cases scratching or friction of the skin.

It is, however, only in persons with a peculiar irritable condition of the skin, that urticaria of any great extent follows these influences. In such cases a single flea bite may give rise to the most intense pruritus and general urticaria. In children it is frequently caused by the irritation of the bites of lice or bed-bugs. In these instances, remedies which do not comprise removal of the cause, have no effect on the duration of the affection.

The most frequent causes of urticaria are internal or indirect, the eruption on the skin being probably a reflex effect of an irritation of some internal organ. In by far the majority of instances it is due to irritation of the stomach or other portion of the intestinal canal. The ingestion of certain articles of food, especially shell-fish, pork, cheese, strawberries and raspberries, or the administration of various medicinal agents, especially terebinthinate remedies, produce in cer-

tain predisposed individuals an abundant outbreak of urticaria. The eruption is frequently accompanied by symptoms of decided gastro-intestinal irritation, as vomiting and purging, sometimes choleric form in character. Not unfrequently catarrhal jaundice is present in these cases, and seems to intensify the pruritus, probably by a direct irritation of the cutaneous nerves by the circulation of biliary matter in the blood.

Very often the urticaria can be ascribed only to a peculiar idiosyncrasy with reference to the articles of food causing the eruption, while at other times dyspepsia, or rather gastric irritability, seems to be present. In these cases the individual is compelled to limit himself to a very short diet-list, any deviation from which is sure to bring on an attack of acute indigestion and urticaria. This latter is especially liable to be the cause in the frequently-recurring, almost chronic urticaria, so often seen in young children.

In persons suffering from the gastric irritability here referred to, an eruption of little, pinkish, intensely itching papules frequently occurs accompanying attacks of acute indigestion. This papular eruption is primarily nothing more than an urticaria, but in consequence of the continual scratching which it induces, secondary eczema results. The primary eruption is frequently not recognized, and hence the eczema is too often believed to be caused by the gastric derangement, leading to its irrational treatment.

If, in consequence of the administration of an alkali, or a small dose of calomel, the urticaria ceases, its cause being removed, the eczema generally gets well without further treatment, unless it has become chronic, when proper local measures should be instituted.

A number of functional or organic disorders of the female sexual apparatus are sometimes complicated by chronic urticaria, but as these troubles

are usually accompanied by gastric derangement, the latter may, in most of the cases, be the exciting cause of the eruption.

In malarial regions, intermittent urticaria, with or without febrile symptoms, is sometimes seen. Emotional disturbances, such as fright, anger or great sorrow, appear not unfrequently to stand in a causative relation to urticaria. Moreover, many well-defined nervous disorders are complicated with the same affection. It must also be confessed that cases occur for which no cause can be discovered.

The *prognosis*, so far as life is concerned, is favorable. If the cause of the disease can be discovered and removed it usually requires no further treatment. Very often, however, it becomes chronic and persistent, either from non-recognition of the cause, or because the latter cannot be removed.

The *diagnosis* is easy. Remembering the characteristic lesion of urticaria and the subjective sensation of itching or burning, always present, no mistake is liable to occur in differentiating this from other cutaneous diseases. To discover the cause is, however, as has been before pointed out, often most difficult and unsatisfactory.

The pathology of urticaria is one of those unsettled problems which abound, not only in dermatology, but also in other special fields of medicine. Diffident of my ability to offer a rational solution of the difficulty, I have yet thought it justifiable to make the attempt.

Chemical examinations of the urine have shown that there is frequently a deficient elimination of urea and uric acid in cases of urticaria. It has been supposed by some that the retention of these excretory matters in the blood produced an irritating effect upon the peripheral nerves in the skin and so gave rise to the development of the characteristic eruption. It has also been supposed that a similar irritation was produced in consequence of the

resorption of some products of decomposition in the alimentary canal. While both these theories may be to a certain very limited degree true, they explain but few of the cases.

The nature of urticaria has long been held to be neuropathic, but only the most recent discoveries in the physiology of the nervous system have furnished some sound and reasonable basis upon which to build a safe and satisfactory theory.

Without going into the history of the researches upon the vaso-motor nerves, it will suffice to say, that it is now pretty generally admitted that there are two sorts of vaso-motor nerves antagonistic to each other in their effects upon the vessels—the vaso-constrictors and vaso-dilators; that these nerves originate in ganglia situated in the spinal cord and medulla oblongata, and that they leave the cord by the posterior nerve roots. This important discovery contradicts Bell's law that only afferent nerves are contained in the posterior nerve-roots, and demonstrates that these roots also contain efferent nerves. Whether the vaso-motor nerves are really sensitive nerve-fibres, or whether these bundles contain an independent set of vasal nerves is not yet known.

It has been further demonstrated that a reflex contraction or dilatation of the small blood-vessels was possible, and furthermore, that certain systems of vessels acted in a manner antagonistic to each other. This antagonism has been particularly studied relating to the vessels of the skin and of the abdominal viscera. It has been found, namely, that when the the constrictors control the abdominal vessels, the dilators act upon the vessels of the skin.* The latter is not to

*Stricker (Allg. Pathologie, pp. 216) says, "There is reason to believe that in the nervous centres the constrictors for the vessels of the abdominal viscera, and the dilators for those of the skin are more easily excited than their antagonists."

be ascribed to a passive dilatation in consequence of the increased blood-pressure, a complementary dilatation, so to speak, but active and due to a stimulant effect, possibly reflex, upon the vaso-dilators of the skin.†

The experimental evidence, I think, shows that a rational basis exists for the neuropathic theory of urticaria. It remains to show how nervous action may bring about the exudation and to support the theory with clinical evidence.

Auspitz has expressed the opinion, based upon a portion of the same experimental evidence which has been detailed above that urticaria is due to a reflex dilatation of blood-vessels. He considers it not improbable that there may be vaso-motor centres (ganglia) in the skin itself and that an impression need not first be transmitted to the vaso-motor centres in the spinal cord or medulla oblongata. In this way he explains the transient and irregular dilatation of one capillary district with the complementary contraction of a neighboring one. Apart from the fact that such complementary contraction has not been, to my knowledge, demonstrated to occur in districts of the skin contiguous to an urticarial eruption, the hypothesis appears to me too far-fetched and unstable. The circumstance pointed out by Stricker and before referred to, that irritation of sensitive nerve-fibres causes dilatation of vessels, seems to point to a solution much nearer at hand, namely, that certain sensitive nerve-fibres possess in addition the function of vaso-motors. The action of the vaso-dilators cannot always be due to reflex impressions because the effect is produced upon a very limited section of the skin, and in other cases is pro-

duced at the site of the irritation. Examples of this are seen in the circumscribed production of urticaria in consequence of contact with nettles, bites of insects, &c., while I can hardly doubt that general urticaria, the accompaniment of gastric irritability, is due to a reflected impression upon the vaso-motor centres themselves.

The clinical evidence in favor of the neurotic nature of urticaria is abundant, but I shall only quote that which seems to bear more directly upon the hypothesis I have endeavored to sketch.

A case is reported by Leopold (*Archiv.f. Gynäkologie*, 1875,) in which the application of leeches to the sacral region in a hysterical woman was followed by an outbreak of general urticaria. Bulkley (*Chic. Journ. Nevo. and Ment. Dis.*, Oct., 1875,) has reported two cases of Graves' disease, an affection admittedly neurotic in its nature, in which a marked symptom was an erythematous and urticarial affection of the skin. But the most striking case is one reported by Dr. G. E. Walton, (*Cinti-Lancet and Clinic*, vol. iii, 513), in which the whole surface, including the palms of the hands and soles of the feet, were covered by an urticarial eruption attended with intense itching. When the patient assumed the recumbent position, the eruption disappeared entirely, returning again, however, when she arose. The patient, a woman, aged 47, was approaching the climacteric and the menses had been irregular for some time. After the failure of various plans of treatment, the constant current applied along the spine produced complete recovery. Dr. Walton suggests disturbance in the circulation of the cord as being the possible cause.

Charcot* relates several cases of cutaneous exudative affections depend-

†The evidence derived from experiment, summarized above, is given in extenso in *Stricker's Vorlesungen Ueber Allgemeine und Experimentelle Pathologie*, Vienna, 1877-80, pp. 203-253, and in *Foster's Physiology*, fourth edition, New York, 1880, pp. 200-224.

*Lectures on Diseases of the Nervous System. Philadelphia, 1879. Pp. 52.

ing upon central nervous disease. In one of these, a case of sclerosis of the posterior columns, each paroxysm of the violent shooting pains characteristic of locomotor ataxy was accompanied by the eruption of enormous patches of urticaria.

Treatment.—Notwithstanding the frequency of urticaria the therapeutics of the affection are in a very unsatisfactory state. When the eruption is the result of irritating ingesta in the stomach or intestinal canal, an emetic or brisk purge will in most cases promptly relieve the affection. As an emetic I decidedly prefer the sulphate of zinc (20 grs. in water) or fl. ext. of ipecac given in a little syrup. Except in young children, however, such acute cases not very often come into the hands of the practitioner, and almost never into those of the specialist.

When, however, the disease has become chronic, or is very frequently recurring, it gives a great deal of annoyance both to the patient and physician. The cause must be sought out and removed if possible. It is frequently necessary to go over the patient's functions, one by one, to rigidly revise the diet-list, regulate the bowels, stimulate the action of the liver if this seems necessary. The urine should be examined and any abnormality of this secretion corrected if possible. The saline laxatives and diuretics will find a frequent application in these conditions. In cases where the eruption shows a regular periodicity in its recurrence, full doses of quinine sometimes have a prompt effect, and if it fails, arsenic may be tried and sometimes found successful.

Recently, several of the later remedies have been tried and reported favorably. Thus 20 gr. doses of salicylate of sodium three times a day have been followed by prompt cure in a number of cases of more or less persistent urticaria. My own experience with this remedy is limited. Schwim-

mer reports success in similar cases with 1-60 gr. doses of atropia sulphate. Still more recently Pick has reported brilliant results with pilocarpine. Dr. Levy, of Richmond, recently told me that he had tried the same remedy (fl. ext. jaborandi) with the effect of completely removing the eruption as soon as the sweating effect of the remedy became apparent. It promises to be worthy of trial. Some years ago I treated, experimentally, several troublesome chronic cases with drop doses of balsam of copaiba, which I had seen recommended in some journal. My success with this remedy was not uniform, however, and I should be disposed to give the jaborandi or salicylate of sodium the preference. The local treatment is sometimes a matter of importance. Any spirituous lotion, sol. carbolic acid $\frac{1}{2}$ per cent., or black wash may be used. I have found the least disagreeable anti-pruritic lotion to be one consisting of 5i. of benzoic acid to a pint of water.

THE VALUE OF LOCAL TREATMENT IN SYPHILITIC ULCERATION OF THE LARYNX AND PHARYNX.

BY J. D. ARNOLD, M. D., BALTIMORE.

Although fully aware of the almost universal scepticism as regards the efficacy of topical treatment in any of the varied manifestations of syphilis upon the mucous surfaces, I shall venture to submit a few considerations in this connection, and my excuse for asking attention to a subject upon which so much has already been said, is that during a six month's attendance at the Vienna Clinic, I have taken special care to observe and note the results of the several methods of treatment there in use.

The importance of bringing about a quick process of healing in syphilitic ulcerations of the pharynx and larynx

is evident not only from the readiness with which their delicate structures yield to the inroads of this disease, but especially because of the considerable impairment of voice, which comparatively slight loss of substance in these regions so often occasions. In the pharynx, for instance, just that structure—the soft palate, which is most intimately concerned in giving timbre and resonance to the voice—is the favorite seat of specific ulceration, and being of a loose spongy nature offers little resistance to its destructive changes. It is certainly true that this disease in the pharynx and larynx is only a local manifestation of a systemic poison for which we possess specifics in iodine and mercury; still it very often happens that before the exhibition of these drugs produces an impression upon the system at large, such changes have taken place in the organ of voice as to impair it irreparably.

Although the views of Sigmond, who insisted that constitutional remedies are neither indicated nor valuable in syphilitic affections, unless some broad constitutional symptoms be present, have been entirely abandoned by the majority of later syphilographers, distinguished names are not wanting amongst the exponents of his teachings, even at the present day. Morrell Mackenzie, in the introduction to his late book on "Diseases of the Larynx," asserts himself to be in great measure a follower of Sigmond, as regards the relative merits of general and local medication in a large class of venereal troubles, especially those of the respiratory tract. At all events, any means by which the breaking down of tissue may be prevented or held in check until constitutional remedies shall have become operative, must certainly be valuable and desirable aids to treatment. That such means are ready at hand I am convinced from the close observation of their use in a large

number of cases of specific ulceration in the throat.

The syphilitic ulcer in the pharynx and larynx is nearly always due to the breaking down of the papule which runs exactly the same course upon the mucous membrane as upon the skin. It first distinguishes itself as a small nodule raised above the surrounding surface, has a dry glistening appearance due to the stretching of its epithelial covering by the cell infiltration beneath, and presents a dark brownish-red color. From this nucleus the infiltration extends circularly; the oldest portion of the papule (the centre) breaking down first, loses its epithelia and exposes a raw ulcerating surface. When the ulcer has once formed, it rapidly spreads, and its secretion, which is chiefly composed of epithelial detritus and pus cells, contains highly infectious properties. The edges of the ulcer, whether they be round or irregular, are always bounded by a deep red halo, probably caused by the escape of the coloring matter of the blood from compression of the vessels by cell infiltration. In those cases where doubt exists between syphilis and tuberculosis, this red margin of infiltration is a valuable aid to diagnosis, the tuberculous ulcer being nearly always surrounded by pale anæmic mucous membrane.

The vocal cords are not infrequently the seat of ulceration, which usually spreads longitudinally upon their surfaces, and makes their vibrating edges ragged and uneven. In this region the loss of substance is often so great that the vocal processes of the arytenoids are laid bare; in such cases phonation becomes imperfect and the voice remains forever hoarse. When the ventricular bands or arytenoids are attacked by the syphilitic process an œdema is occasionally developed, which does not readily yield to the ordinary measures for the relief of this complication. It goes without saying that the greater the destruction

of tissue before the ulceration is checked, the more considerable will be the distortion of parts from subsequent cicatrisation.

In the pharynx, as before stated, the parts most frequently attacked by specific ulcer are the soft palate and uvula, and since for the articulation of vowels and vocals it is necessary that the naso-pharynx shall be cut off from the mouth cavity, it will readily be seen that any perforation or loss of continuity in the velum must greatly interfere with distinct speech. The most notable examples of defective speech from an analogous cause, are cases of paralysis of the soft palate, after diphtheria. It is quite common that the posterior portion of the velum palate is the seat of an ulcer, and during the process of healing becomes adherent to the wall of the pharynx; in this manner the mouth is permanently cut off from the superior pharyngeal cavities, and in consequence the voice remains nasal and muffled.

Without regarding, therefore, the more serious complications which may arise from syphilis in the larynx and pharynx, it is plain that the integrity of speech and voice is much endangered by this destructive process whose speedy abortion is only possible by a prompt and active treatment.

As far as the general anti-syphilitic treatment is concerned, the choice between iodine and mercury must in some measure be influenced by each individual case; but experience seems to show that when dealing with ulceration upon mucous surfaces mercury by inunction makes a quicker and more decided impression than any other method of medication. Although, as I mention above, the papule is the precursor of throat ulceration in the great majority of instances, gummata do sometimes occur as manifestations of the later or tertiary forms. In these cases the iodide of potassium or sodium is to be preferred to mer-

cury. In this form of the disease every effort must be made to produce a rapid impression with the drug, and to this end large doses must be given, 6-12 grammes in twenty-four hours. To this small quantities of mercury bichloride may be added with advantage. Of course as soon as the iodine gives positive evidence of its presence in the system, the dose must be reduced to the medium. The importance of a good nourishing diet cannot be too much insisted upon upon during the course of any specific treatment.

Nearly all writers upon the subject devote very little space to the local treatment of syphilitic sore throat, and after giving a meagre list of astringent washes and sprays wherewith the ulcerating surfaces may be properly cleansed, they almost invariably end their short chapter of therapeutics with the naive remark that after all very little must be expected from topical medication. The use of iodoform, which has been lately much extolled, is not well tolerated in the larynx or pharynx, because of its highly disagreeable odor, and I have seen no decided benefit from its exhibition. The method of local treatment which is employed at the Vienna Clinic, and from which I have seen most satisfactory results, consists in pencilling the face of ulceration with the following solution:—

℥	Iodini Potassae,	0.5
	Iodini Puræ,	0.3
	Glycerini,	40.00

The diseased surface having been thoroughly cleansed of all secretion by careful washing with a weak solution of copper sulphate, the iodoglycerine is applied with the brush *two or three times daily*, whilst the infiltrated edge of the ulcer is occasionally touched with silver nitrate fused upon a metal sound.

I transcribe from my notes of a large number treated in this manner, a synopsis of four cases, which I have chosen because I think they fairly illus-

trate the point that a properly directed local treatment will effect or very materially aid the healing of syphilitic ulcers in the throat and mouth.

CASE I.—A girl, aged 17, came to clinic November 4th. Complained of hoarseness, cough and pain in swallowing. Laryngoscopic examination discovered a small irregular ulcer upon the posterior portion of right vocal cord, slightly encroaching upon the arytenoid of same side. Surface of ulcer covered with grayish-white exudation. Mucous covering of pharynx reddened and engorged; a few isolated follicles enlarged. The patient had, in addition to the throat trouble, a papular syphilide upon face, neck, arms and breast. The ulcer in larynx was cleansed and brushed with iod-glycerine, and the enlarged follicles were touched with solid silver nitrate. Patient was sent to syphilis ward with instructions to use three grammes ung. cin. by inunction daily, and to present herself for local treatment twice every day.

Nov. 6th.—Ulcer on cord has not spread since the beginning of treatment, and has a cleaner smoother appearance. Edges of infiltration touched with fused silver nitrate.

Nov. 9th.—The patient declares that her throat is much better, as she experiences no discomfort in swallowing. Examination with mirror shows that repair has already commenced. There is no longer a well-marked border of infiltration; the surrounding healthy tissues seem to send their projections into the diseased portion of the cord. (These thin white glistening bands are the first cicatricial formations, and evidence the process of healing).

Patient is still somewhat hoarse. The eruption upon the skin shows as yet no signs of sub-siding.

Nov. 14th.—The ulcer has entirely disappeared, leaving no traces except a thin cicatricial membrane, which slightly impedes the finer movements

of the cord. Eruption on skin as before.

Nov. 22nd.—The former seat of ulceration in larynx is scarcely distinguishable; voice normal; papular syphilide on skin somewhat paler.*

CASE II.—A hostler, aged thirty-one, came to clinic November 13th, complaining of pain in swallowing and great soreness in mouth. Inspection of pharynx showed a broad shallow ulceration upon the right pharyngo-palatine arch. The mirror discovered a small round ulcer upon the superior edge of the epiglottis. Patient admitted having had a chancre two years ago. Hé was stripped, and a grouped small-papular eruption found upon his breast and abdomen. He could not enter the hospital and was treated as ambulant. Ulcerations upon soft palate brushed with iod-glycerine, ungt. cin. ad. gammes 3, inunction daily.

Nov. 17th.—The ulcer on epiglottis has entirely disappeared; that upon velum somewhat contracted and free from detritus. Eruption on skin spreading; a few spots on arms and thighs.

Nov. 23rd.—Ulcer on soft palate completely healed; a thin cicatrix draws the uvula somewhat to the right side. Eruption on skin unchanged. (This patient continued inunction until December 19th, at which time the syphilide had completely faded).

CASE III.—A strong, healthy-looking woman, 38 years old, applied to clinic October 6th, with a deep ulcer on base of tongue extending on to left glosso-pharyngeal fold. All other districts of the mouth, pharynx and larynx normal in appearance. Denies ever having had syphilis. Put upon 5 grammes potassæ iodide daily; no local medication.

Oct. 9th.—Ulcer on tongue has —

*The washing with copper sulphate solution, and pencilling with iod-glycerine, was of course practiced twice daily in this case as well as in all those which follow, except third case.

spread to left pharynx wall, and two small erosions have made their appearance on the internal face of the epiglottis. Iodide increased to ten grammes daily.

Oct. 14th.—No perceptible change in ulcer on tongue and pharynx; erosions on epiglottis have developed into an irregular ulcerating surface covered with thick white secretion. Iodide stopped. Ung. cin. 3 grammes.

On Oct. 19th, although no considerable alteration had taken place in the ulcerations, the epiglottis had grown so thick and œdematous as to give rise to an alarming dyspnoea. Ice poultice was applied to the throat, and the ulcers for the first time pencilled with iod-glycerine.

On Oct. 20th, the œdema had entirely subsided, and the breathing was quite easy. The ulcers on tongue and pharynx have a clean red look, and there is hardly a trace of pus in their secretions.

Oct. 25th.—Ulcer on epiglottis completely cicatrised.

Nov. 1st.—Ulceration on tongue and pharynx entirely healed, with the exception that in the furrow in front of the glosso-pharyngeal fold (which has lost considerable of its substance) there is a small sluggish sore. Touched with galvano-cautery.

Nov. 6th.—Patient was dismissed quite cured.

CASE IV.—A boy, 16 years old, came to clinic February 10th, with a large ulcer covering nearly the whole of the soft palate. He states that he has been treated for three weeks, taking four pills a day (probably iodide). Admitted to the ward and treatment immediately commenced with pencillings of iod-glycerine.

On Feb. 23rd he was dismissed cured, with no other evidence of the former enormous ulcer than that the velum was covered with thin, scarcely perceptible stellate cicatrices and presented immediately over the centre of its left arch a small perforation that

would, with difficulty, admit the point of a lead pencil.

I think that in the first two cases the healing of the ulceration may in great part be fairly ascribed to the use of the iod-glycerine, for in both cases the throat trouble subsided long before the skin eruption showed any signs of disappearing, whereas in the absence of local treatment this order is usually reversed. In case number three the recourse to the brush was followed by such immediate improvement that there is no room for doubt as to the part it played. Case four was a trial of the iod-glycerine without any constitutional medication, and although the result was a happy one it does not justify the conclusion that in such cases general treatment is unnecessary. —*Vienna, April 7th, 1881.*

SANITARY TRACTS, COMPILED FROM MEMORANDA ON PRECAUTIONS AGAINST CONTAGIOUS AND INFECTIOUS DISEASES.

BY C. W. CHANCELLOR, M. D.,

Secretary of the Maryland State Board of Health.

NO. I.

GENERAL PRINCIPLES OF PREVENTION.

In every case where a contagious or infectious disease prevails, or threatens to prevail in a city, town or country district, it is of more than common importance that, both by private action and by action of sanitary authorities, everything practicable should be done to insure freshness of atmosphere and dryness of soil, and entire absence of dirt throughout the city, town or district, especially in and about houses; to guard against overcrowding of inhabitants, and to provide that impure water be not drunk.

It is particularly desirable, indeed necessary, that inspections should be frequently and carefully made by the sanitary authority, and that whatever proceedings are required to procure

the abatement of nuisances should be pressed with all practicable dispatch.

A very general belief prevails that certain infectious disorders have been induced by constant exposure to certain effluvia in cases where the infection could not possibly have come from any previous sufferer with the disease. The spread of contagious and epidemic diseases, when once introduced into a neighborhood is, unquestionably, promoted by offensive emanations from whatever source they may arise; and there can be no doubt that many diseases may be developed anew under the influence of effluvia such as are liable to issue from the decomposing organic matter and some business establishments.*

It is probable that the excess of pulmonary mortality which has been observed in many American cities, and which is otherwise inexplicable, is due, in a measure, to poisonous gases, such as amoniacal vapors, sulphuretted hydrogen, &c., which are given off from open privy vaults, foul cesspools, imperfect sewers and contaminated foundations, as well as to irritating trade effluvia. With regard to the former the preventive measures adopted are generally far from efficient, sometimes because the persons consulted by the authorities have not always possessed the requisite technical knowledge and experience for advising in such matters, sometimes because outlay of money for the construction of proper and efficient sanitary works has been grudged. In regard to the trade effluvia, means should be adopted for preventing altogether, or at least for reducing to a minimum, the nuisances occasioned by the diffusion of such emanations

beyond the works. There are many such works in which no pains are taken in this direction. This has partly arisen from want of consideration for the public health, partly from want of capital and the resulting struggle to make any profit, and often the difficulty of disturbing the traditions of the business.

As respects these sources of nuisance the obvious remedy is "cleanliness" in the broadest sense of the word. All filth and decomposable matter should be removed from the premises within twenty-four hours after it is created, either by a proper system of sewerage or in impervious covered vessels. Solid offensive refuse should be separated from liquid refuse as far as practicable, and such should be disposed of in its appropriate manner, the solids being deposited and speedily removed in covered impervious vessels, and the liquids being run off in proper drains, in such condition as not necessarily to give rise to offensive emanations.

It is not, however, necessary in dealing with this part of the subject to enter into a general discussion of the causes of epidemic prevalence. It is simply requisite to state that our knowledge of these causes is practically limited. Various local conditions of houses, places, and populations, the existence of which appears to be necessary to any marked development of the obscure phenomena designated "epidemic." The three conditions which form the chief link of connection between the exceptional prevalence of disease and its epidemic prevalence is defective drainage, bad air and impure water. To secure pure air we must have good drainage; and to secure pure water, when the supply is drawn from open streams, or is retained for a period in open reservoirs, the water must be subjected to proper sand filtration before it enters the service pipes, supplemented if necessary by charcoal filtration at

*Dr. Alfred Carpenter has stated his belief (*Lancet*, 1871, vol. 1, and *Public Health*, April, 1874,) that blood and garbage from slaughter-houses, when undergoing decomposition, may cause the development of scarlatina in persons exposed to their effluvia. He lays considerable stress on the influence of decomposing vertebrate blood in giving origin to this disease.

the house. Pollution of air and pollution of water are undoubtedly the most powerful causes in determining epidemic diseases.

It is sometimes very difficult to find a practicable remedy for existing sanitary evils, but let us protest against any assertion that there is no practicable remedy for such evils. The discovery and application of the remedy may, indeed, be difficult, but after all it is only a question of time, experiment and cost.

SOCIETY REPORTS.

EIGHTY-THIRD ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

(Continued from last Number.)

SECTION ON PRACTICE OF MEDICINE.

This report was read by the Chairman, Dr. Richard McSherry. He remarked that no one could look over the progress of medicine during the past few years without being impressed with its variety and vastness, yet in the midst of many discoveries, revivals of old ideas, facts true or false, there is recently nothing which stands out preëminently as of superlative importance above all its surroundings. It does not happen every year, nor indeed often in a century, that such a startling change occurs in practice as that which springs from the discovery and investigation of the *physical signs* in the exploration of the phenomena of disease.

If asked what diseases it is most important to drive from the population of the earth the answer might be consumption, syphilis and malarial diseases. It may not be possible to banish them entirely, but their ravages may be reduced to a small fraction of what they are at present. Reference was then made to the first of these diseases, namely, consumption, and some prominent points in the history, nature and prognosis were considered. Our fathers spoke of pulmonary consumption, but in the refinements of French pathology *pulmonary* gives away to the more definite ex-

pression of *tuberculous* consumption, which the advances of later years would discard again, because it is said consumption causes tubercles and not tubercles consumption. The doctor wished to consider what tubercles may be, whence they come and what can be done with them by hygienical, prophylactic or therapeutic means, whether there be a tuberculous and non tuberculous form of consumption, and whether either or both are now and forever fixed among those ever fatal maladies like cancer, the standing reproach of medicine. Tubercle was next referred to, and its different varieties, characteristics and pathological significance discussed.

The views of Laennec, Niemeyer and other pathologists were presented in illustrating the differences of opinion as to the pathology of tubercle. After citing a number of high authorities in Europe and America, and the views held in these countries, the doctor says, "One may still ask what is tubercle and what are its relations with consumption." The answer may be found in the last edition of Cornil and Ranvier. "*The question of tubercle bristling with contradictory opinions is still obscure but light commences to dawn upon it.*"

The intimate nature of the tubercle is yet the open field of speculative pathology, where as in so many other fields wheat and tares grow together. The immense research and great learning brought to bear upon this important subject have not cleared up the obscurities in which it is involved. This labor is not lost, for the practical acquaintance gained with the nature of consumption in the progress of late years is of extreme value.

The ventilation of the question as to whether inflammation is causative of tubercles has brought out a fact calculated to correct some of the teachings of Laennec. Cases without number may be cited of acute or chronic pulmonary inflammation without subsequent tuberculosis, and of tuberculous development in subjects in whom no such inflammation had been observed, still there remains the fact that the danger and mortality of tuberculosis are intimately connected with inflammation, and that without inflammation, whether primary

or secondary, tubercles would be comparatively harmless. In subjects of a scrofulous cachexy, inflammation of the lungs, the result of carelessness, accident or exposure, will probably end in consumption and death. The relations between scrofulosis and tuberculosis are exceedingly intimate; a bad cold, a pneumonia or typhoid fever may cause the beginning of the end. After these tuberculosis becomes apparent; before such invasion it gave no evidence of its existence. "*Keep these people from inflammation and you keep them free also from consumption.*"

The questions of prevention and cure were next discussed. For prevention begin with the infant and see that it draws its supplies from no tuberculous mother or nurse, or diseased cow whose milk may affect the child. Avoid overtaxing the brain of the child at school, and the impure air of the crowded school room. A good hygiene is wanted at all times. Separate beds between healthy and diseased persons were insisted upon.

The subject of *Derivative Medicine* was the next topic discussed. This was illustrated with characteristic cases showing how one disease gave place to another, and the influence of a morbid process in relieving a more dangerous lesion in other structures. For example: A patient suffering with advanced phthisis recovered from this trouble after a severe attack of confluent small-pox. These facts were offered as suggesting the value that may lie in the principle of substitution or derivation.

Some Difficulties in Diagnosis was the topic next discussed. Typical forms of disease are usually given in text-books, but it is rare that a typical case is presented in practice. The recognition of a disease is not at all times an easy task. The lines of division are not at all times discernible. Cases do not present always uniformity of character. The too common mistake is made of selecting for study and for record only the most exaggerated and intense forms of a malady. A case of *misconception* was related in illustration of the danger of crediting the statements of patients without verifying them with the most positive physical examination. A lady, believing herself to be pregnant, applied for treat-

ment. She had felt the foetal movement and was satisfied the pregnancy was an abdominal one. The most careful examination revealed the presence of floating tumors, which were found to be moveable kidneys. The sensation of movement had increased until the patient firmly believed herself pregnant. It was difficult to disabuse her mind of this belief and but for the accuracy of the diagnosis unfortunate lines of treatment might have been adopted.

The next paper before this section was read by Dr. J. S. Lynch, entitled "A New Point in the Differential Diagnosis of Cardiac and Pericardial Murmurs. Pericardial Friction murmurs sometimes so exactly resemble valvular and even ventricular murmurs that it is impossible to determine their source by the mere *quality* of the sound alone. They may extend, especially to the left, so far, as to leave the question between mitral regurgitation and pericardial friction almost impossible of solution. Flint and Da Costa also assert that roughening of the pleura from inflammation of that membrane may give rise to a friction murmur synchronous with the heart's systole, caused by forcibly driving the mediastinal pleura against the pulmonary surface. Any new sign, therefore, which aids in resolving our doubts in such cases, becomes of great diagnostic value and is worth careful study. The speaker had during the last year and a half employed the following sign, and ample experience enabled him to recommend it with ~~marked~~ confidence:

Whenever the friction murmur is produced at or near the heart's apex (the only condition in which there will be any serious difficulty in the diagnosis), if we cause the patient gradually and slowly but entirely to inflate the lungs, we will perceive that the friction murmur becomes progressively more intense until the action of insufflation is complete. Now make the patient "hold his breath" while the lungs are in this state of complete insufflation and the murmur will be steadily maintained at its maximum intensity. Cause him then to expire in a like slow and gradual manner and the murmur will be found to gradually decline in intensity until its minimum will be reached at the completion of the ex-

piratory act, at which it will be maintained until another inspiration increases its intensity. The murmur does not entirely disappear, however. It is present at all stages of respiration, but always presenting this variation in its intensity. The explanation of this sign was to be found in the anatomical arrangement and physiological action of the parts concerned—heart, pericardium and diaphragm, the result of which is that the walls of the pericardial sac in inspiration are placed upon the stretch and at the same time applied more closely and forcibly to the walls of the heart, so that any roughening of the serous surface will yield a sound in intensity proportionate to the depth of the inspiration. The expansion of the lungs themselves assists in the effect. That the sounds were not merely the systolic pleural friction sounds of Flint and Da Costa is proven by the presence in all the cases observed of grave symptoms of cardiac trouble, whilst those of pleural and pulmonary disease were absent.

In conclusion, the writer gave at length his reasons for doubting whether there could be produced a systolic pleural friction sound at all if the pericardium is healthy.

SECTION ON OBSTETRICS AND GYNECOLOGY.

Dr. A. F. Erich read the report of the *Section on Obstetrics and Gynecology*. He commented favorably on the activity displayed by Maryland physicians in these branches of medicine, and gave a brief summary of all published papers on obstetrical and gynecological subjects which had appeared during the year from the physicians of the State. In conclusion, Dr. Erich described a new operation for restoring the perineum when ruptured during labor. The prevalent conceptions of gynecologists in reference to the form of the perineal body were freely criticised, and the defects of the various methods of operating pointed out. The perineal body of nature, according to Dr. Erich, is not like the triangular or pyramidal mass of tissue figured by Thomas and other authors, but a small, backward-curved mass composed of fat, connective and muscular tissue, and skin, and situated

principally *below* the recto-vaginal septum, which latter enters very slightly, if at all, into the formation of the perineal body.

In rupture of the perineum, Dr. Erich holds that the vaginal mucous membrane is torn off—more or less transversely—from the muco-cutaneous junction in front; the mucous membrane retracts, and if the distention from the passing head or shoulders is sufficiently great, the perineum is ripped open towards the rectum. The problem to be solved in restoring a perineum ruptured in this way is not as Thomas states: "A triangle with apex above and base below. Two surfaces of this shape are to be vivified and held face to face with sutures. That is the whole operation." It is rather to raise and bring forward the floor of the vagina to its former level, and stitch it to the vulvar surface in front by means of sutures running inward from the ostium vaginae on either side, and finally closing up the perineal rent by a row of superficial sutures. No deep perineal sutures, acting like a bag-string, are used. The sutures of fine iron wire, are all passed superficially. The operation is briefly as follows: The patient being placed in the exaggerated lithotomy position of Simon, the cicatricial tissue is dissected up by sharp scissors until the surface is denuded to some distance beyond the cicatricial border. The denuded surface is then of a rectangular shape with its longer diameter transversely. If the rent extends into the rectum, the edges are then pared and the rectum first restored by passing the sutures from the rectal side. These rectal sutures, and also those in the vagina, are secured by means of the author's deep suture stylets. The rectum having been made whole, the centre of the vaginal mucous membrane at the denuded border is seized with forceps, the floor of the vagina raised and drawn forward to its normal level and attached to the denuded surface of the vulva. Interrupted sutures—all superficial—are then passed through the approximated edges of the denudation until the seam is completed on one side. The surfaces on the other side of the vaginal orifice are united in a similar manner and the sutures secured by the deep suture

stylets. The operation is then completed by a row of superficial sutures uniting the skin from the fourchette to the rectum and so restoring the normal perineum. By the raising and drawing forward of the floor of the vagina and uniting it with the vulvar orifice at its normal level, the anterior wall of the rectum is drawn forward, resting the anterior curvature of the rectum, between which and the posterior commissure of the vulva, all that can be with propriety termed the perineal body is situated. Dr. Erich proposes for his operation the name of Kolpo-perineoplasty, as it is not merely a perineorrhaphy as described by authors, but a plastic operation by which a normal perineum is reconstructed. The advantages claimed by Dr. Erich for the operation are:

1. It restores the normal perineum.
2. It is simple and easily performed.
3. It gives rise to but little pain after the operation, as all deep sutures and the tension which they produce are avoided.
4. It is more apt to be followed by primary union than other methods of operating.
5. The perineum thus restored is very dilatable and not apt to give way in succeeding labors.

THIRD DAY.

The annual oration was delivered at 12 M. by Prof. William Goodell, of the University of Pennsylvania, his subject being "*The Dangers and the Duty of the Hour.*" The theme, as was to have been expected from the speaker's associations, was one suggested by his observations as a gynecologist. The dangers of the hour he considered to be the faulty system of female education and the unwillingness of our women to become mothers. The burden of maternity demanded that the growth and well being of the body should be as carefully looked after as those of the brain. The intellectual equality, "high-culture," ideas lead us to excessive brain work, in fact, to over-education of our girls.

Forcing the intellectual centres, especially during the stage of brain-growth, stunts the organs which preside over animal life, withdraws energy from the reproductive centres and arrests physical

development. Precocious cleverness is attainable only at the cost of physical and sexual development. Our system of brain-cramming breeds a host of sickly girls who swarm on every class of society. Manifold diseases, mostly of a uterine complexion, date from the recitation room. Fully one-quarter of the graduating class from a certain college were ruined in health. The association of ill-health with brilliant scholarship was noted. Under the high pressure of our public schools even a class which ought to live by manual labor is made unfit for it. The worn-out, rest-needing girl is launched into the dissipations of society to become in due course of time the sickly wife and invalid mother. Being unable to respond to the demands of married life she at first tolerates, then loathes them; the husband is driven to unfaithfulness, and separation or divorce often result.

Another great evil of our educational system is its publicity—the public examinations, commencements, &c. These produce a craving for the outside heat and strife and stir of life and destroy all taste for the quiet and repose of home. The decay of home and family life is a lamentable feature of modern social life. Selfishness and individualism are supplanting them. Hence come criminal abortion and the prevention of reproduction, sins which defile every class of society. These sins are accountable for much, if not most of the wretchedness and misery of this land.

The increase of divorces is alarming. Such an extent has it reached that in New England, where there is one divorce to every twelve marriages, a Divorce Reform League has been instituted. In Massachusetts the number of divorces is more than double what it was twenty years ago. Besides the actual divorces the many cases of voluntary separation, and of applications for divorce, which were denied, are to be taken into consideration. There is also a patriotic side to the question. The histories of Greece and Rome were referred to for proof that national greatness and national decay depend upon the reverence for the marriage tie and prolific marriages on the one hand, and to repugnance to marriage and reluctance to bear children on

the other. What happened to these nations may yet befall our own—it may die for want of men.

To reform these abuses and restore woman to her legitimate sphere and functions are the duty of the hour. The physician can powerfully aid in effecting this reform by discouraging improper employments and securing from their employers suitable rest, by inculcating the sacredness of marriage, by giving instructions as to physical education of girls, by wholesome advice about exercise, clothing, food, &c., by discountenancing preventive measures and by sternly opposing every suggestion of criminal abortion.

He suggested that much good might be done by the issuing, by the Faculty, of lay tracts on the moral education of the community and on the physical education of woman.

At the conclusion of the oration, which was listened to with profound interest by a crowded audience, a vote of thanks was passed to the author, and a copy of his oration requested for publication in the Transactions

The Report of the *Section on Obstetrics and Gynecology*, began the previous day, was resumed and concluded with the presentation by the President of a uterine dilator, which he had invented for the purpose of dilating the canal of the cervix in cases of placental retention, intra-uterine fibroid, puerperal eclampsia, etc. It consisted of two long blades, fitting one into the other, and of handles which were united by a screw. The speaker stated that it was a very powerful instrument and must be used with great care. The report as a whole was then discussed.

In reply to Dr. Erich's statement that the operations for lacerated perinæum in vogue had been invariably unsatisfactory and unsuccessful in his hands, Dr. Wm. T. Howard said the average of successes is about one-half; in the last five years he had very rarely experienced a failure,—in fact, only in those cases where the nurse allowed the urine to dribble away. He thought one cause of failure was the attempt to do too much at one time.

Dr. Erich replied that he referred to a normal restoration of a perinæum.

This he has failed to obtain, but on the contrary such a result, that he was afraid to trust the renovated perinæum in the next labor.

Dr. Uhler exhibited a patient suffering with *Stricture of the Œsophagus*. The patient was an elderly gentleman in whom the trouble began nine months before with slight hemorrhage. The cause was not apparent, but there was a suspicion of malignant disease. The patient had been nourished for some time entirely by injections of concentrated liquid nourishment injected into the stomach through a flexible tube. Five pints twice a day were thus administered; 120 feedings in all had been given. The saliva was utilized and injected with the food. Life had undoubtedly been prolonged by this means. The method of feeding was illustrated in the presence of the Faculty.

Dr. Samuel Theobald, Chairman of the *Section on Ophthalmology and Otolaryngology*, presented a report, in which he offered some practical suggestions in regard to the management of the commoner affections of the eyes. All eye affections, not requiring operative treatment, he said, might be divided into four classes; first, those in which astringents are indicated; second, those in which atropia is indicated, in conjunction usually with constitutional remedies; third, those in which constitutional remedies are chiefly to be relied upon; and, fourth, those in which glasses are needed. The first class, characterized by free conjunctival secretions and absence of considerable ciliary irritation, would include all inflammatory affections of the conjunctiva, except phlyctenular conjunctivitis and diphtheritic conjunctivitis; the second class, characterized by excessive ciliary irritation and slight conjunctival secretion, would comprise phlyctenular conjunctivitis, all the varieties of corneal inflammation, iritis, and inflammations of the sclera and episcleral tissue; the third class, presenting marked impairment of both distant and near vision seldom accompanied by pain or external evidences of inflammation, all the diseases of the fundus oculi and the paralytic affection of the eye muscles; the fourth class, presenting visual disturbances rarely manifested equally

in near and in distant vision, the various errors of refraction, defect of accommodation, insufficiency of the internal recti muscles, and unconfirmed squint.

In the treatment of the diseases of the first class sulphate of zinc, alum, and nitrate of silver were especially recommended; the usefulness of the yellow oxide of mercury in granular conjunctivitis and pannus was spoken of, and the value of boracic acid in catarrhal and purulent conjunctivitis, especially in ophthalmia neonatorum, was dwelt upon. The latter agent was recommended also in hyperæmia of the conjunctiva in blenorrhœa of the lachrymal sac, and in suppuration and ulcerative keratitis. Atropia or any one of the astringents named could be combined with it if indicated. Its efficacy was believed to be chiefly due to its antiseptic properties, though it exhibits besides a soothing or anodyne influence.

In prescribing atropia the strength of the solution should vary with the circumstances requiring its use. In iritis and in severe corneal inflammation, four grains to the ounce, and in exceptional instances eight grains, is the proper strength. In phlyctenular ophthalmia a one-grain solution is usually strong enough, but this should be supplemented by the application once a day of an ointment of yellow oxide of mercury—one grain to a drachm of vaseline. The efficacy of constitutional treatment in iritis was insisted upon. Most cases of iritis are due to syphilis. In the iritis of acquired syphilis mercury was recommended; in the iritis and the interstitial keratitis of inherited syphilis, iodide of potassium. In phlyctenular ophthalmia a good dose of calomel and rhubarb given at the outset of the disease was often found very useful; the other remedies mentioned as most useful in this disease were the syrup of the phosphates of iron, quinia and strychnia and the syrup of the iodide of iron.

The ocular lesions upon which the visual defects of the third class of diseases depend, were usually the result of causes which were constitutional or remote. Syphilis was responsible for very many of them; others were due to Bright's disease, to diabetes, to cerebral and spinal affections, and to the toxic

action of alcohol and tobacco. The biniodide of mercury, iodide of potassium and strychnia were the agents recommended in this class.

The visual disturbances to which the anomalies of refraction and accommodation give rise, the speaker said, did not always assume the form of indistinctness of sight, but often appeared as asthenopia or weakness of the eyes. The importance of prescribing glasses for the correction of these defects was insisted upon, and their usefulness not only in improving vision, but in relieving asthenopia and in some instances frontal headaches, and marginal blepharitis, as well as in curing of unconfirmed squint, was pointed out. "As a rule, whenever errors of refraction exist, or the development of presbyopia renders near vision indistinct, glasses are indicated, the prevalent belief to the contrary, notwithstanding."

Dr. Randolph Winslow read a volunteer paper upon *Hepatic Abscess*. After dwelling upon supposed infrequency of abscess of the liver in this and other temperate climates, and showing that it occurred more often than was supposed, he passed on to a review of the general history of the disorder. The value of aspiration for diagnostic purposes was insisted upon, both on account of the certainty, as well as the safety of the method.

The aspirator was believed not to be so successful for the cure of abscess, as free incision, or puncture with trocar and canula, with the introduction of a drainage tube and frequent washing of the abscess cavity with carbolized solution. However it was recommended to aspirate all abscesses tentatively, and if they refilled in large amount and quickly to employ incision, drainage, etc.

The employment of Listerism, and free incision was advocated as the best method of operating.

A volunteer paper on *Suicide* was read by Dr. G. Liebman. The following facts are deduced from an analysis of this paper.

1. Suicides can be traced in the majority of cases to insanity.
2. In a minority of cases insanity must be excluded.

3. Suicide is on the increase in a regular proportion.

4. Suicide is of greater frequency in the male than the female sex.

5. Suicide occurs at all ages.

6. It is influenced by the seasons and by climate.

7. Suicide is more frequent in prosperous and highly civilized than in barbarous races.

OFFICERS FOR ENSUING YEAR.

The following were elected officers for the ensuing year: President, Dr. Frank Donaldson; Vice-Presidents, Drs. A. H. Bayley and I. Edmondson Atkinson; Recording Secretary, Dr. W. G. Regester; Assistant Secretary, Dr. G. Lane Taneyhill; Corresponding Secretary, Dr. J. Edwin Michael; Treasurer, Dr. Judson Gilman; Executive Committee, Drs. H. P. C. Wilson, L. McLane Tiffany, P. C. Williams, Jas. Carey Thomas and Christopher Johnston; Examiners for Eastern Shore, Drs. James Bordley, W. G. G. Wilson, Julius Johnston, J. E. M. Chamberlain; Examiners for Western Shore, Drs. S. C. Chew, C. H. Jones, T. S. Latimer, H. M. Wilson, R. McSherry, T. F. Murdoch, T. A. Ashby.

The following are the Committees, etc., as appointed by the President: *Library Board*, Drs. I. E. Atkinson, G. Lane Taneyhill, J. R. Quinan, B. B. Browne, Geo. H. Rohé; *Committee on Publication*, Drs. W. G. Regester, Judson Gilman, E. Cleveland Coxe, A. B. Arnold; *On Memoirs*, Drs. W. F. A. Kemp, Thomas F. Murdoch, A. H. Saxton, E. N. Wise, J. E. Gibbons; *On Ethics*, Drs. J. A. Steuart, T. B. Evans, S. C. Chew, J. C. Thomas, J. T. Monmonier; *Curator*, Dr. H. S. Bowie.

Section on Sanitary Science, John Morris, W. G. Regester, W. C. Van Bibber, W. M. Kemp, F. W. Patterson (Balto. Co.); *Section on Anatomy, Physiology and Pathology*, C. F. Bevan, R. Winslow, J. W. Correll, D. W. Cathell, St. G. W. Teackle; *Section on Psychology and Medical Jurisprudence*, Drs. J. S. Conrad, G. Liebman, D. I. McKew, J. R. Ward, R. Gundry; *Section on Microscopy, Micro-Chemistry and Spectral Analysis*, Drs. W. D. Booker, R. B. Morison, J. H. Hartman, A. G. Hoen; *Section on Surgery*, Drs. A. P. Smith, L. McLane Tiffany, J. Shelton Hill, G. H. Boyland,

G. E. Porter; *Section on Practice*, Drs. T. B. Evans, J. S. Lynch, W. G. Harrison, C. O'Donovan, C. H. Ohr; *Section on Obstetrics and Gynecology*, Drs. Thos. Opie, W. B. Griffith, E. F. Cordell, T. A. Ashby, P. H. Reiche; *Section on Materia Medica and Chemistry*, Drs. J. R. Uhler, E. G. Walls, W. H. Diffenderfer, F. B. Gardner, L. H. Steiner; *Section on Ophthalmology and Otolaryngology*, Drs. J. J. Chisolm, W. J. McDowell, W. W. White, A. Friedenwald, J. T. Smith.

Delegates to Pennsylvania State Society, Drs. John Morris, J. A. Steuart.

Delegates to Virginia State Medical Society, Drs. Thos. A. Ashby, G. B. Reynolds.

Delegates to International Medical Congress, which meets at London, Aug. 3rd, 1881, Drs. J. Carey Thomas, Christopher Johnston, John Morris, H. P. C. Wilson, W. T. Howard.

EDITORIAL.

THE LATE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.—The Thirty-second Annual Session of the Association, which was held in Richmond, Va., May 3rd, 4th, 5th, and 6th, was in many respects a success. The general sessions presided over by Prof. J. T. Hodgen, of St. Louis, were characterized by great dignity of decorum and a most commendable promptness in the dispatch of the business of the Association. Even ethical subjects (which always excite so much feeling) were discussed with calmness, and a very evident desire to settle matters in dispute in a fair and liberal manner. A brief allusion to some of the most important features of the meeting will doubtless prove of interest to those who were not present, whilst it may serve as an acceptable reminder to those even who attended, since in the bustle and confusion inseparable from such large assemblages as this it is very hard to get a clear idea of what has been done. In preparing this notice, as well as in giving the other extracts from the proceedings, to be found in this issue, we are indebted to the excellent report of the meeting given in the daily edition of the *Virginia Medical Monthly*.

One of the most important acts was the adoption of a resolution setting forth the necessity of an active, vigorous, weekly journal instead of the "bulky, tardy and little-read" volume of transactions and providing for the appointment of a committee of five to digest and report in detail a plan for the publication of a journal, the salary to be given the editor, the form of journal, with time place and mode of publication, and "such other particulars as may enable the association to arrive at just conclusions as to the feasibility of the enterprise and the propriety of assuming its responsibilities."

Another important matter was the proposal of the creation of a section on Dentistry, emanating from Prof. Gross, who stated that such a section existed in the British Medical Association. By the rules this proposition must lay over until the next annual meeting, when it will, without doubt, as it should be, be adopted.

The question of teaching and granting diplomas to persons proposing to become homœopaths, eclectics, etc., excited most interest and was discussed with considerable warmth, the negative finding a champion in Prof. Davis of Chicago, whilst Prof. Dunster, of the Michigan University ably espoused the other side. A compromise was effected by the adoption of the following resolution, offered by Dr. Billings, U. S. A.:

"It is not in accord with the interests of the public or the honor of the profession, that any physician or medical teacher should examine or sign diplomas or certificates of proficiency for, or otherwise be specially concerned with, the graduation of persons, whom they have good reason to believe intend to support and practice any exclusive and irregular system of Medicine."

The following resolution offered by Prof. Dunster was adopted:

"That the spirit of the code of ethics forbids a physician from prescribing a remedy controlled by a patent, copy-right or trade-mark. This however, shall except a patent upon a process of manufacture or machinery, provided such patent be not used to prevent legitimate competition; and shall also except use of a trade-mark used to designate a brand or manufacture, provided that the article so marked be accompanied by working formulae, duly sworn to and also by a technical, scientific name under which any one can compete in manufacture of same."

Another important matter was the appointment of a committee on atmospheric conditions and their relation to disease, with authority to select suitable localities for continuous observations and records. This committee were authorized to draw upon the treasury for \$500 for carrying on their work.

The Governor's speech of welcome at the opening was eloquent and brimful of the most cordial greeting. The President's address, immediately following, was sound, practical and conservative. The reports from the Chairmen of Sections were made by Professors William Pepper, Hunter McGuire, A. Jacobi, D. S. Reynolds, and Drs. Billings, Toner and Chadwick. These names indicate sufficiently the value of the reports. One of the most striking and original was that of Professor Hunter McGuire upon "Operative Interference in Gunshot Wounds of the Peritoneum," which he advocated.

The work of the Sections, of which there were six, went on after the close of the General Session each day. The best attended were the Sections on Obstetrics and Gynecology, Surgery and Practice. We may allude to the application by Dr. Sayre of his plaster of Paris jacket to a child suffering with lateral curvature of the spine, and to discussions on pessaries and pneumonia, as among the subjects that elicited most attention in the Sections.

The social element of the meeting deserves very great commendation. Never were the homes and hearts of people more completely at the service of the guests than those of the Richmond profession to us upon this occasion. Besides the elegant reception at the Westmoreland Club by Drs. McGuire and McCaw, a very delightful operatic performance at Mozart Hall and the climacteric entertainment and banquet at the theatre, there were frequent private receptions, lunches, dinners, etc., given by individual physicians and others. We desire to acknowledge the receipt of such courtesies at the hands of Gov. Holliday, Drs. Coleman, Isaiah H. White, Geo. Ben. Jonston, Parke, Davis & Co., and of Mr. Valentine, the sculptor. On the afternoon of the last day a number of the members enjoyed, as the guests of

the new Richmond & Alleghany R. R. a ride up the beautiful valley of the James.

The number of members and delegates in attendance is represented as having been over 500. Among them were many men of distinguished fame, but we missed a large number of those who have shed lustre upon our American profession, as Sims, Thomas, Emmet, Wood, Holmes, Da Costa, Stillé, etc.

Dr. J. J. Woodward, U. S. A., of Washington, was elected President for the ensuing year, and St. Paul, Minnesota, selected as the next place of meeting.

During the session of the Association, meetings were also held of the Association of Medical Editors, the American Surgical Association and of the Association of American Medical Colleges.

The point of most interest in the last, perhaps, was the official statement that of 64 colleges only 16 had failed to come up to the Association's requirements in the matter of graduation, whilst 22 had surpassed those requirements.

Such is the briefest possible notice of this most delightful and profitable meeting, the recollections of which, as well as of the unbounded hospitality of the Richmond profession, will long be bright spots in the memories of those who can look back upon them.

SANITARY TRACTS.—With the present number we begin the publication of a series of "Sanitary Tracts" compiled by Dr. C. W. Chancellor, of this city.

The growing importance of sanitary science demands that more attention should be given to this study by the medical profession than it has received in the past. It will not be denied that sanitary science bears the closest relation to medicine and is one of the most important departments of scientific study which can come under the attention of the practitioner of medicine. It has so happened that this study has been largely divorced from the legitimate position it should hold as the ally of the physician, and has been created a special department managed by specialists or laymen who often possess but a limited knowledge of medicine. Sanitarians, as a class, are not of necessity medical men, and from this circumstance are not at

all times capable of taking the broadest view of sanitary matters. As a result sanitation is frequently made to serve interests which are not directed for the best good of the science. It is time for the profession to recognize the value of sanitary knowledge and to rescue the science from the false position it is assuming as a separate department of medicine. Unquestionably there should be experts and specialists in this as in other studies, but a more general knowledge should be disseminated and greater importance should be given to the study of the science in its relations to medical practice.

AN EXCELLENT RESOLUTION.—At the recent meeting of the American Medical Association a resolution was adopted by the Section on Medicine, Mat. Med. and Physiology urging the general association to appoint "a committee of three, to include the incoming Chairman and Secretary and the outgoing Chairman, to select subjects to which special attention shall be given by the Section at the next meeting, and that the subjects so selected shall be made public at least ninety days before the said meeting." The object of this resolution is so important that its adoption by the general association was urgently called for.

The resolution contemplated two purposes: first, the selection of subjects of paramount interest to the profession upon which papers might be prepared by such members as were interested in these subjects; and, second, a public announcement of the subjects selected so that those who desired to attend the meeting might come well prepared to take part in the debates and thereby enhance the value of the work done by the Sections. Up to this time there has been no concert of action in reference to the papers read before the Sections. No subjects have been set apart for discussion previous to the meeting of the Sections but members have been allowed to read papers upon subjects chosen at will. Now and then a first-class paper has been presented, but as a rule the papers read before the Sections were scientifically weak and the discussions they provoked desultory and inferior in character. In fact the work in the Sections would not bear favor-

able comparison with that of many of the local societies in various sections of the country. At the last meeting in Richmond this was noticeably the case. A few good papers were read, but the majority were unworthy of the occasion and of the national body before which they were presented. It is evident that something should be done to elevate the standard of the work done by the American Medical Association. These annual meetings contemplate more than the mere social attractions which are presented. The Association claims to be the representative body of the American profession. One of its main objects is "for cultivating and advancing medical knowledge;" another "for exciting and encouraging emulation and concert of action in the profession." These two important objects are in great measure neglected and will remain so unless a stronger effort is made to secure better papers and discussions at the annual meetings.

The plan suggested by the resolution here referred to is this: The Committee from each Section will select such subjects as are deemed of greatest importance in their respective departments. These subjects will be announced in the medical journals of the country ninety days before the annual meeting. Letters will be written to distinguished members of the profession requesting the preparation of papers on these subjects. Such papers as are read will be opened to debate, and the profession at large, having received due notice of the subjects, may come to the meetings well and fully prepared to take part in the discussions. Any member, however, will have the privilege of reading a paper on the subjects selected by the Committee or upon any subject of his own selection. The resolution does not seek to exclude members from voluntary offerings. It aims to direct work in a given channel and to raise the standard of the matter presented to the Sections.

If this plan is fully carried out beyond doubt the interest and value of these meetings will be largely enhanced, and a volume of transactions will be issued which will reflect greater credit upon the intelligence and scientific influence of the American Medical Association.

MISCELLANY.

DIAGNOSIS OF THE FATTY HEART.—J. M. Fothergill, *Practitioner*, April, 1881. The diagnosis of the fatty heart is largely a calculation of probabilities; still it may be made at times with a great approach to accuracy. When there is a murmur, the way is pretty clear, for the diagnosis of valvular lesions is well understood. When there is no murmur, and no very perceptible evidences of dilatation, and yet there are subjective symptoms of cardiac asthma, together with feeble impulse, and the sounds indistinctly heard, the case is puzzling. The following group of phenomena is very suggestive of fatty heart: Want of vigor in the heart, as evidenced by physical examination; arterial anæmia, shown by cold extremities and a defective pulse; dyspnœa easily excited; syncope; acute anæmia of the brain, shown by attacks of vertigo, and strokes resembling apoplexy. These are rendered more suggestive by evidence of atheroma in the arteries and the arcus senilis. In fact we may be fairly certain of the existence of the fatty heart when we have such a combination. Fatty degeneration of the heart is ordinarily but a fragment of a widespread degenerative change. It is not, as a rule, an occult process of which no sign is given, and the individual knows nothing of it until he awakens on the other side of the grave. With few exceptions it has such distinct associations that if they are not found it is very unlikely to be present.

The condition which simulates it most closely is "heart-starvation," due to mal-assimilation. Here the heart especially suffers because its work *must* go on, and its feeble impulse, its weak and ill-defined sounds, the small compressible pulse, and readily-produced dyspnœa closely resemble what we find in fatty heart.

But fatty heart is a disease of old age, a senile degeneration; its associations are usually absent in heart-starvation (which is a disease of early or middle life) and in the latter there are indigestion, anorexia, loss of sleep, nervous symptoms, etc., and when assimilation is restored the alarming symptoms pass away. The author believes, with the late Warburton Begbie, that repair is attainable in certain cases of fatty heart, chiefly by improving the diet

SOLUBLE COMPRESSED PELLETS:—A NEW FORM OF REMEDIES FOR HYPODERMIC USE, AND APPLICABLE TO OPHTHALMIC AND GENERAL MEDICATION.—In the manufacture of these, sodium sulphate is used to give the necessary bulk; being quickly dissolved, moreover, on coming in contact with water, it leaves the morphia or other active ingredients of the pellets free, and in a fine state of subdivision for solution. The advantages claimed for this method, were:—

1. Convenient size of the pellet.
2. Immunity from change.
3. Accuracy of contents and dose.
4. Certainty and rapidity of action.
5. They may be used by the mouth.
6. They are adapted to ophthalmic practice.

He had used the pellets for more than a year, and thought they were destined to banish from use the changeable solutions, and equally inconvenient powders. *Proceedings of Amer. Med. Ass'n.*

DANGERS OF CHLORATE OF POTASH.—Speaking of *diphtheria*, Dr. Jacobi said, "In this connection, I desire to say a final word in regard to large doses of chlorate of potassium, often recommended for diphtheria. My warnings in regard to this drug have at last been heeded. Extracts from my writings on this subject have been extensively published, and experiments on animals, made in Europe by Marchaud and others, have proved my

clinical observation of the frequent occurrence of nephritis, and fatal nephritis, resulting from the incautious use of potassium chlorate. A number of fatal cases have been described, and it may be that much carelessness on the part of the public, and many accidents will be avoided in the future. *Proceedings, Amer. Med. Ass'n.*

SPECIALISTS—A danger which threatens the profession, is the adoption of exclusive specialties by those not well trained in medicine. It cannot be denied that the early and exclusive study of the affections of a part, tends to narrow the intellectual grasp and cramp the powers of the man, who yields to the influences incident to such partial training. In the best sense, a specialist is a physician and something more; in the worst, he is something else, and something less than a physician. *President Hodgkin's Address, Proc., Amer. Med. Ass'n.*

OPERATIVE INTERFERENCE IN GUN-SHOT WOUNDS OF PERITONEUM.—* *

* "In view of these facts, the writer ventures to advocate operative interference in gun-shot penetrating wounds of the peritoneum with any visceral lesion, and similar cases without visceral injury. The wounds in the abdominal walls should be enlarged, or the linea alba opened freely enough to allow a thorough inspection of the injured parts. Hæmorrhage should be arrested. If intestinal wounds exist, they should be closed with animal ligatures, trimming their edges first if they are lacerated and ragged. Blood and all other extraneous matter should be carefully removed, and then provision made for drainage. If the wound of entrance is dependent, drainage may be secured by keeping this open. If the wound is a perforating one, and the aperture of exit dependent, the patency of this should be maintained, and, if necessary, a drainage tube of glass or other materia

introduced. If there is no wound of exit, and the wound of entrance is not dependent, then a dependent counter-opening should be made and kept open with a drainage tube. If it is urged that the means suggested are desperate, it can be said in reply that the evil is desperate enough to justify the means."—*Dr. Hunter McGuire, Proceedings Amer. Med. Ass'n, 1881.*

BULLETIN OF MEDICAL SOCIETIES.—*Section on Obstetrics and Gynecology, Med. and Chir. Fac. of Md.*, meets Friday, May 27th, 8.15 to 10.30 P. M.

Programme:—Papers on "Hystero-Epilepsy," by Dr. Chas. H. Ohr, and on "Intra-Uterine Douche," by Dr. Thos. Opie. Reports of Cases of "Extra-Uterine Pregnancy," by Drs. Ashby and Erich. Note on "Probable Cause of Tardy, Painful Labor, not Hitherto Recognised," by Dr. Rohé.

Baltimore Medical Association will meet Monday, May 23rd, 8 P. M.; Dr. Hartley on "Puerperal Convulsions."

Medical and Surgical Society meets every Wednesday, at 8.30 P. M.

Clinical Society of Maryland will meet Friday, May 20th, 8 P. M. Dr. Miles will read a paper.

Academy of Medicine will meet Tuesday, May 17th, 8.30 P. M.

COLLEGE OF PHYSICIANS AND SURGEONS, BALTIMORE—The vacant chair of *Materia Medica and Therapeutics* has been filled by the election of Prof. E. Lloyd Howard, who will lecture also, as before, upon *Medical Jurisprudence and Hygiene*. Dr. J. W. Chambers, has been elected *Demonstrator of Anatomy*.

A WORTHY TRIBUTE.—Prof. Roberts Bartholow, of Philadelphia, a native of this State and a graduate of the University of Maryland, has dedicated his most recent work, on "Medical Electricity," published by Messrs. Henry C. Lea's Son & Co., to Prof. Richard McSherry, of this city, his preceptor and friend.

RULES FOR USE OF PESSARIES.—By Dr. Paul F. Mundé.

First, be sure of the diagnosis.

Always replace the uterus before applying a pessary.

Never insert a pessary when there is evidence by the touch of inflammation of the uterus or adnexa, or when pressure with the finger on the spot where the pessary is to rest gives decided pain.

Choose an indestructible instrument, (exceptions in Prolapsus.)

First measure the vagina and let the pessary correspond exactly with it.

The finger should be able to pass between the vagina and the pessary when the latter is in situ.

Remove a pessary as soon as it gives pain.

Examine the patient on her feet after introducing the pessary.

Always tell the patient that she has a pessary in her vagina.

Tell the patient to return in one week for examination, and she should be seen every four to eight weeks.

Do not introduce a pessary which the patient cannot remove herself.

Let the patient use daily vaginal injections.

Let superincumbent pressure be relieved by support for the skirts, and in ante-displacements, add a suprapubic pad. *Abbreviated from Proceedings, Amer. Med. Ass'n.*

A SPECIAL meeting of the *Med. and Chir. Faculty* was held April 27th. A committee was appointed to consider the subject of *legalizing anatomical studies in Maryland*, to report at a future meeting.

Committees were also appointed on *Fire-Proof Library Building*, and on *Reception of Delegates* at the next annual meeting.

Objection was made to the previous action of the Faculty in relation to the *B. & O. R. R. Relief Association*, and the *annual assessment of \$3.00*

levied upon city members by a resolution adopted at the annual meeting; but in each case the previous action of the Faculty upon these subjects was sustained.

QUININE IN TRAUMATIC FEVER.—Dr. H. F. Campbell, of Georgia, said that in his section, and he thought it applied to most malarial sections, he has noticed that quinine after an operation, almost invariably cuts short traumatic fever. He was so much impressed with its value, that he never neglects to use it after operations. *Proc. Amer. Med. Ass'n.*

St. Paul, Minnesota, was selected as the place for the next annual meeting of the American Medical Association, and Dr. Stone was appointed chairman of the local Committee of Arrangements.

The following officers were elected for the ensuing year.

President, Dr. J. J. Woodward, U. S. A.

Vice-Presidents, Drs. P. O. Harper, Arkansas; L. Conner, Michigan; Eugene Griscorn, North Carolina, and Hunter McGuire, Virginia.

Secretary, Dr. Wm. B. Atkinson, Pennsylvania.

Treasurer, Dr. R. J. Dunglison, Pennsylvania.

Librarian, Dr. Wm. Lee, Washington.

PILOCARPIN IN SCARLATINAL NEPHRITIS—Dr. Seemann gives the following indications for the use of pilocarpin in certain cases of nephritis:

1. Muriate of pilocarpin is useful in cases of scarlatinal nephritis, and may often save life when other remedies fail; but it must not be resorted to except in very serious cases. 2. When, after its successful administration, the œdema begins to lessen, cure should be left to nature and to other remedies, because renewed doses of pilocarpin may cause too rapid absorption of the transudation, and may

thus lead to uræmia. 3. After each dose of pilocarpin, the state of the respiratory organs must be carefully watched; if the bronchial mucus be not satisfactory expectorated, or if the slightest indication of pneumonia show itself, further doses of the drug must not be given.—*Med. and Surg. Reporter.*

PSYLIUM SEED IN CONSTIPATION.—We read in *Paris Medical* that Mr. Noel Gueneau de Mussy proposes using *Psylum* or *Sarragota Seed*, besides *white mustard seed*, the use of which is excellent, or *flax seed* in the natural state.

Psylum is a species of plantain, commonly called *Fleawort*, because of the appearance of its seeds, which are quite small, and very mucilaginous. A tablespoonful in half a glass of water is taken before dinner. He says that with a number of persons this method has proven as successful as with the Spanish lady from whom he obtained it. In other cases, however, he was obliged to alternate with more powerful laxatives, such as aloes or rhubarb, so as to keep up the effects. It is probable that *psylum* seed, like others of its kind, is not persistent in its effects, although in a number of cases it seems to have been so.—*Med. and Surg. Reporter.*

MEDICAL ITEMS.

THE Obstetric Journal of Great Britain and Ireland ceased to be published January 1st, 1881.—There were 28 delegates from Maryland present at the late meeting in Richmond. The State furnishing the largest number of delegates was Pennsylvania.—The *New Century Cooking School*, of Boston, has been showing what can be done in the way of domestic economy by entertaining a number of guests at a dinner, which averaged seven cents per head. The bill of fare was one

calculated to make the mouth water, embracing soup, meats, vegetables, bread and coffee.=*Dr. Bulkley's Ointment for Eczema*:—

R Ung. Picis, ʒi.
Zinci Oxidi, ʒii.
Ung. Aquæ Rosæ, ʒiii. M.

=The publishers of the Louisville *Medical News* have secured as its editor Prof J. W. Holland, M D., a gentleman well known as a graceful writer and able practitioner.=Mrs. Ernest Hart, the wife of the well known editor of the *British Med. Journal*, has done excellent original work in estimating the hemoglobin in the corpuscles in cases of "idiopathic anemia," which she has published in a pamphlet recording her own researches.=Flouric acid is the latest remedy recommended for the cure of goiter, by Dr. Edward Woakes, in the *Lancet*. He begins with fifteen minims of a one-half per cent. dilution three times daily, and, if necessary, increases the dose from 20 to 70 minims. In 85 per cent. the cure was decided.=Gangliasthenia is the name given by Dr E. H. Ward to a condition due to weakness of the ganglia or ganglionic system of the body. All disturbances of the organic functions are due to this asthenic condition. The symptoms of this affection and of passive congestion are the same. The treatment is bromide of ammonium.=Dr. J. R. Page, of this city, invites attention to the topical use of fresh lemon juice as a most efficient means for the removal of membrane from the throat, tonsils, etc., in diphtheria. It should be applied with a camel's hair brush every two or three hours.=Dr. Kidd, Lord Beaconsfield's physician, denies that he is a homœopath. Four years ago he resigned all connection with the Homœopathic Hospital and Society. He uses the drugs of the British Pharmacopœa, but in many cases has learnt from experience that what are called homœopathic remedies may be usefully prescribed. Such remedies he

freely uses in suitable cases according to his own judgment. He does not prescribe infinitesimal doses.=The Earl of Beaconsfield, it is claimed, died of "gouty bronchitis."=There were 1,900 medical students in New York city last winter.=A Michigan quack gave the following prescription: "R Powder of egg-shells, 20 grs. To be taken *annually* every two hours until her bowels were *removed*."—(*Phys. and Surg.*)=Dr. Buck says that every ear-ache should be considered as the beginning of what, later, may prove to be a fatal disease. It should receive early and constant attention from a physician who is able to examine the ear with speculum and reflected light—(*Ex.*)=The annual meeting of the Ohio State Medical Society will be held in Columbus, June 14, 15 and 16.=In the State of Ohio there are more than 4,000 active regular practitioners of medicine.=In all Europe there are published 583 medical journals; in America there are 183; in Asia 15; in Oceanica 4.=The *Toledo Medical Journal*, we regret to learn, has suspended.=The physicians of Nashville have petitioned their City Council to prohibit the tolling of bells for funerals in that place, urging as a reason for the request, that the tolling "had a *depressing* effect upon the *balance of their patients*."—(*Lancet and Clinic*).=Ligatures made of strips cut from the aorta of the ox are the latest novelties in surgery.=It is claimed that by the addition of any of the essential oils, preferably oil of menthae hip., the disagreeable odor of iodoform may be entirely disguised.=Dr. Crothers, a well known authority on *Inebriety*, claims: 1. Inebriety is a physical disease with a distinct origin, development and progress. 2. In the causation, the desire for alcohol is both a symptom and a disease. 3. When inebriety is studied as a special disease in hospitals for this purpose, its curability will be found equal to any other disease.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

OBSERVATIONS ON THE MANAGEMENT OF THE PERINEUM DURING LABOR.

BY THOMAS A. ASHBY, M. D.,

Late Resident Physician to the Maryland University Hospital, Lecturer on Obstetrics, Summer School, University of Maryland, etc., etc.

(Read before the Baltimore Medical and Surgical Society.)

There are few procedures in obstetric practice in regard to which authorities so disagree as in the management of the perineum during labor. Those who have written upon this subject, in the text-books upon midwifery, have, as a rule, given but little attention to it, discussing the entire subject in a vague, indefinite manner, frequently recommending lines of practice not marked for clear and accurate study, and misleading to one who would arrive at a definite knowledge of the correct practice to be adopted in given cases. An examination of these most generally used text-books will convince one that the views which are taught are conflicting and

for the most part unreliable. Cazeaux, in his comprehensive treatise upon "Theoretical and Practical Midwifery," devotes less than a half page to this entire subject, and presents methods of procedure in general terms by no means suited to every class of cases. Playfair and other authorities have passed over the subject in the same brief manner.

"Support to the perineum" is the one important question which has engrossed the attention of those who have treated of the management of the perineum. The attempted solution of this riddle has left but little space for the consideration of other details. Considering the attention which has been given to discussion as to the relative merits of the two plans of procedure, "support" and "non-support," one would conclude that a settled position ought to have been reached. Not so, however, do we find this to be the case. Those who advocate the two measures are about as far apart as Nægèle, the distinguished Heidelberg professor, who taught that "under ordinary circumstances any support to the perineum is

unnecessary," and Ramsbotham who says, "as soon as the head has come to press on the external parts, it becomes our duty to take our seat by the bedside and never to move from our position till the child has passed. This we do to protect the perineum and to prevent laceration."

Churchill goes even farther than Nægéle. He informs us that he has "witnessed more than one case where rupture was owing to excessive and injudicious support." Leishman remarks that the practitioner who never puts his hand to the perineum in his practice will have fewer cases of ruptured perineum than he who admits support in any form as applicable to every case of labor.

Other methods as conflicting in opinion as that of perineal support have been advocated by different writers. Thus artificial dilation of the external orifice of the vagina has been advised by Smellie; lubrication and stretching of the soft parts by Puzos; pressing of the perineum towards the sacrum by Roederer and incision by others. These various methods have served in no small degree to confuse the anxious seeker after light in this branch of study.

Dr. Wm. Goodell, in his *Clinical Lectures* (page 93), has thus humorously summed up the diversity of practice employed. He remarks: "One advocates pressure with a folded napkin; another with an unfolded napkin; a third scouts all napkins, whether folded or unfolded; one plugs up the rectum; another empties it. The perineum is pushed forward by some, backward by others. Some place their hands transversely across the perineum; some longitudinally with fingers looking upwards; some longitudinally with fingers looking downwards, as runs the nursery rhyme: Simon says thumbs up, Simon says thumbs down." These remarks fully illustrate the various methods in practice and clearly teach the neces-

sity for clearer insight into a procedure which should be intelligently fixed in every practitioner's mind. The necessary attentions to the perineum are called for in every case of labor. The accoucheur who would escape the complications which are present in many cases of delivery must be guided by rules which will aid in the management of his case during that critical period. The fact that much diversity of opinion exists makes it evident that fixed rules have been difficult to formulate.

Men have fallen into systems moulded by individual experience from this very fact. Whilst this is the case, perineal lacerations will be frequent, yet it may be quite possible to limit not only the extent but the number of such ruptures by forcing the adoption of more careful rules of practice and by a closer study into the causes which induce them. In presenting this subject we must not simply regard the possible rupture of the perineum as the only occurrence to be avoided. This body may escape injury and by its very integrity give rise to conditions of greater consequence to both mother and child than a tear could possibly be. In a study of this subject, all the conditions present must be considered, and a line of practice must be adopted which keeps in view the lesion of greatest consequence to the mother or child. In the management of the perineum, existing circumstances must be the guide to the method employed. Fixed rules cannot be applied arbitrarily, but a course of action should be adopted which is based upon a study of the conditions which are present in the patient in labor. Suggestions as to the management of the conditions which are observed during labor are at all times entitled to consideration.

Those who have enjoyed large experience in obstetrical work have, time and again, been brought face to face with conditions of the perineum, which

required but little, if any, management, conditions in which nature assumed her own rôle and effected the stages of delivery much better than if directed by aided effort. The larger number of cases of labor terminate happily without any obstetrical interference. In such cases it would be mistaken practice to employ any one of the various methods which have been recommended. To support the perineum when no support is required would be an idle task; to lubricate or manipulate equally offensive to good sense. In referring to the management of all cases of delivery we nevertheless find so good an authority as Cazeaux (page 37) saying: "In these last moments the accoucheur must give all his attention to the perineum, which is done by pressing the whole perineal surface equally and with a moderate degree of force by the palm or face of the hand." Such advice as this in the ordinary deliveries appears wholly inadvisable, and the practice must prove annoying and fatiguing to both the physician and patient without conferring the slightest benefit upon the latter. Other authorities have recommended support to the perineum in about as vague terms. The student who would adopt the practice of high authority might doubtless fall into the advice of Ramsbotham, take his seat by the bedside and never move from that position till the child had passed. We can scarcely conceive a more embarrassing practice than that of giving continued support to the perineum in every case of labor. Nor is this practice without its evil consequences, as pointed out by Churchill, who had "witnessed more than one case where rupture was due to injudicious support." Goodell (*Lectures on Gynecology*, page 94) claims that "continuous firm pressure with the hand makes the perineum hot, dry and unyielding." Tyler Smith dissuades from systematic support on the ground that "pressure

upon the perineum is apt to excite the uterus to increased contraction by reflex action starting from the nerves which are distributed through the former structure."

Leishman (page 269), in reviewing the opinions which are held upon perineal "support," remarks: "It was a careful study of these opinions, among others, along with a thorough observation of the process in nature, which led me long ago to condemn support to the perineum as irrational and useless in all cases and undoubtedly hurtful in some."

It is very evident from the views here expressed that one would be misled who blindly adopted a practice of giving or withholding "support," without considering the special indications in the case.

In the management of the perineum the very opposite methods of practice may be called for. He will succeed best who considers well the conditions presented to him and applies his measures intelligently without reference to theoretical teachings. Under certain circumstances support to the perineum is the proper method of procedure; under others it is useless and may be attended with harm.

It is a rule of practice to endeavor to preserve the integrity of the perineum, yet under rare circumstances it may become proper to relieve the perineum by an incision, to avoid a more serious tear by nature's method. Relief may be offered to the perineal body by manipulation and assistance to the foetal head, when under other circumstances no such measures are indicated. Finally the condition of the perineum, its rigid, dry, unyielding state, its elasticity or cohesive properties must all be taken into account in deciding a given line of practice.

I wish to present briefly the line of practice I have adopted in reference to the management of the perineum under the varied circumstances which it presents. It is assumed that peri-

neal lacerations are to be avoided, and that it is the duty of the obstetrician to deliver the child without injury to the mother's soft parts and without serious danger to its own life. In effecting this purpose a careful study must be made in reference to the size of the head, or its presenting parts, the resistance offered to its progress and the influences which are urging its expulsion. In the ordinary cases of labor, the evolution of the head may be watched with ease, and the processes thus studied will greatly assist in the management of more complicated cases. The head, having reached the floor of the pelvis, is brought to a standstill, the process of descent is about complete, and another stage is being entered upon. The perineum here offers forcible resistance to any further progress, and forces a change in the direction of the child's head. The elastic resistance upon the part of the perineum directs the head towards the symphysis, and its extension along the anterior surface, until delivered over its margin. This resistance upon the part of the perineum is of great value in opposing a direct force and in changing the direction of the presenting object. The extension of the head thus altering the line of motion prevents its straight onward movement through the perineal body. The relative strength of the perineum may prevent this latter occurrence provided other causes are not in operation. When the progress of labor has reached this stage, a too powerful uterine contraction may force the child through the perineum by actual pressure from behind, the perineal body being destroyed before it has had time to undergo the natural process of dilation. This active contractility of the uterus may be induced by the unintentional aid of the obstetrician. It is not an uncommon practice with some physicians to administer ergot just so soon as the os uteri is fully dilated, and before the head has

presented against the perineum. Active uterine contraction thus brought about forces the head against the perineum with undue violence, and before distension can be accomplished rupture may be induced. The fact that ruptures do not more frequently attend this practice is a subject for congratulation. This practice should be condemned. It has its origin in one of two things; first, from a misunderstanding of the rules of good practice; or, second, from a desire to hurry-up the labor and thereby save time. Lacerations in such cases are especially apt to occur when there is much rigidity of the perineum, a condition which cannot be foreseen at this stage of labor.

It is generally admitted that the perineum is undergoing during pregnancy a preparation for the distension it undergoes during labor, yet, notwithstanding this fact, it is often poorly prepared for the great strain upon it and yields to the forces brought against it. When proper time is allowed for the advanced movements of the head by alternate relaxation and contraction, the elasticity of the perineum forces forwards the presenting object, and, simultaneously, gradually yields in its structures, directly limiting the danger of rupture. In the management of the stage here referred to, the amount of pressure brought to bear against the perineum must be carefully watched and such support must be rendered as may be required. Should the integrity of the tissues be threatened, all aids to expulsive efforts should be removed from the patient; she should be enjoined not to employ her abdominal muscles and to desist from all voluntary effort. The administration of an anæsthetic would be proper at this time with a view to mere temporary suspension of voluntary effort. Leishman recommends (page 270) pressure exercised against the child's head, which is to be pressed towards the hollow of the sacrum, but he cautions against

diverting the force which should be expended in the direction of the pubic arch. The plan has been recommended of passing the finger back between the face and the perineum, when, by gentle traction under the chin, the face may be made to execute the natural degree of extension until it escapes from the perineum. This aid, intelligently rendered, will no doubt assist in carrying the face along the perineal surface, but great care must be exercised to prevent an injury to both mother and child.

The forceps may here be employed to assist in this process of extension. Cases occur where their aid is indispensable, where the head has been so thoroughly impacted in the vulva that its escape is a question of grave doubt. In these cases a rupture of the perineum should be regarded of secondary importance to the danger which imperils the soft parts of the mother from close impaction, or to the child from its confined position. Here long delay is hazardous, and intelligent aid should be afforded.

Dr. Emmet has pointed out, with great labor and care, the danger which results to the mother's soft parts from delay in delivering cases of impaction of the head. He remarks: "I do not hesitate to state that I have never met with a case of vesico-vaginal fistula, which, without doubt, could be shown to have resulted from instrumental delivery. On the contrary, the entire weight of evidence is conclusive in proving, that the injury is a consequence of delay in delivery" (*Emmet's Gynecology*, page 681). Again, he remarks: "Since the loss is not in proportion to the length of the labor, as has been stated, and we cannot judge of the degree of impaction, there is but one safe course to adopt and that is to effect a speedy delivery. I have for years taught, that, so long as the head recedes after a pain, the patient can be in little danger, notwithstanding the time of labor

may have been prolonged. The jeopardy to the patient begins from the moment when the head becomes stationary, and then the child should be removed as speedily as possible. Just as the head leaves the uterus, and while the neck is still grasped, there will of course be no recession for a moment. But the head in this condition is too low to cause damage at the superior strait and has not yet reached the inferior one. The rule then is applicable, when the head and shoulders have already escaped from the uterus, and the presenting part has begun to touch the floor of the pelvis. At this stage, when the head no longer recedes after each pain, it is proof positive that the soft parts of the mother have lost their natural resilience and that delivery must be brought about speedily."

The rule here laid down by Dr. Emmet is one of value and suggests a line of practice which may not only preserve the integrity of the perineum but relieve the soft parts of the mother from the danger which threatens them from the impacted head of the child. The forceps properly applied will enable the obstetrician to extend the head, and to deliver it through the vulva, when, under other circumstances, its retention would be seriously prolonged. Under the circumstances related by Dr. Emmet the rupture of the perineum would be the least of the two evils presented, and regardless of integrity it would be better for the attendant to act than to delay the passage of the head by means seeking to preserve it intact.

There is a condition of the perineum marked with excessive rigidity, which may cause not only a serious impediment to the completion of labor, but the dangers so forcibly presented by Dr. Emmet. This condition may or may not be accompanied with a lesion. If simply tough and resistant, the condition may be overcome by the use of lubricants and stretching of the

parts, as recommended by Puzos, or resort may be made to ether, chloroform and chloral for their beneficial action. When the result of lesions of various characters, as, for example, cicatrices from injuries or former labors, it may be exceedingly difficult to overcome the resistance of the parts. Under such circumstances an incision with a lancet will enable the head to escape.

Cases of marked rigidity are seldom met with, and are not so likely to give rise to trouble as an opposite condition of the perineum, characterized by great relaxation and want of tonicity. In these cases, the head presenting against the perineum, gives rise to great distension and bulging, and will force its way through the perineal body if support is not supplied. Gentle pressure with the thumb and forefinger of the right hand, during the height of the pain, will sustain the bulge of the perineum, and force the head to undergo an extension and present over the margin. Cases have been recorded where the child was delivered through an orifice made through an enormously distended perineum. The capacity of the perineum for stretching without giving way varies widely in different individuals, and it is possible for delivery to take place in such cases without a rupture, even when support has not been rendered, yet it may be questioned whether it is proper to trust such cases to nature's method. Gentle support applied at intervals, with a view of directing the head forward, can do but little harm. The practice of applying the forceps and effecting speedy delivery may be seriously considered, and I am not so positive that this is not the surest way of preventing a rupture, in this as in many other conditions of the perineum. The forceps acting as a lever enables the obstetrician to extend the face along the perineum and to draw it through the vulva, the fourchette at the same time

being gently drawn back with the finger until it escapes behind the chin.

Cases are met with, in which an unusually small vulvar opening is present through which the head has great difficulty in passing; there is an evident inability of the parts to distend sufficiently to admit of its passage. The strongest uterine efforts seem unable to overcome the resistance of the parts, and unless aid is offered, labor may be seriously retarded from this condition. It often happens that a rupture is unavoidable and the question of relieving the parts by a free incision is presented. Authorities are not all agreed as to the advisability of incising the perineum or of allowing a rupture to occur. Playfair states that it is generally recommended that a slight incision should be made on each side of the central raphé, with a view of preventing spontaneous laceration when the tension is so great that laceration seems inevitable. He, however, does not advocate the method and rather accords with Goodell, who states, that incision of the perineum is rarely, if ever, necessary, unless it is hardened by previous cicatrization. Leishman and Cazeaux make no reference to this operation, and fail to point out the condition here referred to. Under the peculiar circumstances in which the resistance is offered to the escape of the head, the method of relieving the parts by free incisions is a most rational one, and ought to be more frequently employed. It offers the advantage of effecting a speedy delivery, and must be attended with far less pain than a forcible tear. Then, too, the extent of the incisions can be limited, which is not always the case with a rupture. The wounds, whether made by knife or rupture, will unite with equal rapidity if properly brought together. In the condition of rigidity referred to, Goodell has recommended the following method with the object of relaxing the perineum: His advice is that one or two fingers

of the left hand should be inserted into the rectum, by which the perineum may be hooked up and pulled forward over the head towards the pubis, the thumb of the same hand making needful restraining pressure upon the head. Playfair claims that this plan answers an admirable purpose, especially when the perineum is greatly distended and laceration threatened. The method is one I have never employed, and I am not prepared to speak advisedly as to its merits from my own experience. Dr. Goodell's careful study of this subject entitles his method to favorable consideration.

In considering the causes which induce perineal lacerations, reference should be made to faulty conditions of the pelvis, the results of contraction in the transverse diameter of the inferior strait and an approximation of the tuberosities of the ischia. There is an abnormal acuteness of the subpubic angle which forces the head to press upon the perineum before it can move forward under the pubic arch. This cause is present in but few cases but it should be recognized, as it explains how undue violence upon the perineum from misguided efforts or unskilful manipulations may induce the same condition brought to bear upon it by a vice of development. In precipitate labors, practically the same force is in operation, for here the whole weight of the head is driven against the perineum and, unless in a most favorable condition for distension, it yields to the undue pressure applied. Lingering labors have been described as possibly destroying the dilatability of the perineal tissues and thereby acting as a cause of laceration. I have not met with this condition, and am not prepared to attach any importance to the statement.

Malpositions and irregular presentations often act as the cause of perineal lacerations, but these conditions are not so much to be dreaded as the man-

ipulations instituted for their relief. Unskilful use of instruments or bungling attempts at turning or other obstetric procedures so often destroy the integrity of perineal structures as to call for caution in their employment. The blame for this bad work has been placed upon the forceps, very properly, I think, in some instances and unjustly in others. This instrument, when skillfully used, is of great aid in preserving the perineum, yet there is no doubt that faulty application, improper traction, and undue violence, may be the very means of defeating the object for which they were applied. As bearing upon this subject Dr. Goodell remarks (*Lessons in Gynecology*, page 95): "A faulty method, then, of supporting the perineum, plays an important part in the production of these lacerations. But they very generally stop at the sphincter ani, and are rarely complete. When, however, the rent is a complete one, involving the bowel, you will commonly find that the third stage of labor has been ended by the forceps."

* * * "Thus, through false delicacy, many physicians apply the forceps and deliver the woman under a sheet. They work in the dark and cannot see what they are about. Again, in forceps cases, the worn-out physician is tempted to brace a foot against the edge of the bedstead. But braced traction means uncontrollable traction; and when the head jerks past the brim it is very likely, before the physician can recover himself, to tear its way through the perineum." This clear statement of the danger which may result from use of the forceps, should be met with proper advice, hence we find this same author saying: "My advice, therefore, to you—and you will find it a very safe one to go by—is that, in general, and always with primiparæ, you take off your forceps as soon as the perineum begins to bulge, and that you leave the final delivery of the head to the expulsive efforts of your patient."

The position of the patient during labor has been carefully studied with a view of determining its influence in lacerations. Dr. G. J. Englemann, of St. Louis, Mo., in an exhaustive paper presented at the last meeting of the *American Gynecological Society* reviews the different positions observed by different nations. Among other historical facts, the doctor tells us that "only in Siam are women kept in recumbent positions, flat on the back, the rarest of all positions during labor." The author concludes "that the fully recumbent position on the back is inimical to safe and rapid labor." He believes we should advise that in the early stages of labor the woman should be permitted to follow her own instinct with reference to position, and even in the last stages of labor she might be allowed to do the same, except, perhaps, with reference to some general directions, and for these he would say the semi-recumbent position in bed was the one best adapted to give her the greatest assistance.

It not unfrequently happens that during the passage of the head through the vulva a slight tear is unavoidable; this is especially the case with primiparæ, in whom we find a rupture of the fourchette in delivery with very rare exceptions. It so happens that the head having escaped with this slight damage the rent is still further widened by the shoulders of the child. It is easy to understand how this accident may occur, and it is equally important that it should be prevented. Many a slight rupture of the fourchette has been lengthened into a ragged and bad laceration by faulty attention to the delivery of the child's body. With proper aid and attention such accidents may be greatly limited. In certain instances they are apparently unavoidable and defy the most watchful attention.

Before closing the list of causes which enter largely into perineal rup-

tures, I wish to refer briefly to the habit, largely in vogue, of delivering women under heaps of bed clothing, and in positions which absolutely prevent the attendant from observing the influence of labor upon the perineum and of instituting any measures to prevent its rupture. From motives of delicacy and refinement, many are prompted to take things for granted and abstain from making examinations or of exercising any part in the management of the perineum. This habit, the outgrowth of praiseworthy sentiment, is frequently attended with bad consequences to the patient and may reflect seriously upon the reputation of the physician. Whilst the lying-in-woman should be the recipient of every delicate courtesy, and should be spared any exposure mortifying to her feelings, at the same time the accoucheur should not lightly consider his responsibility and the double duty of protecting his own reputation and the welfare of his patient. In every question of doubt he should insist upon being allowed necessary freedom in the management of the case and upon an ocular examination where the touch fails to establish the information which he desires. In spite of the best precautions ruptures will occur. It is the duty of the accoucheur to discover them at the time of their occurrence. Time and again cases are presented to gynecologists suffering from long standing lacerations which escaped discovery upon the part of the attending physician through over delicacy in not requesting an examination of the parts. The danger of this over-conservative element of modesty cannot be too strongly urged.

Many forms of perineal lacerations may be regarded as trivial occurrences if recognized and treated promptly. A simple incised or torn wound of the perineum heals with marked rapidity if brought together with proper sutures. In my own experience I

have observed the most happy results from operative procedures in these lacerations. It has been my invariable rule to bring the parts together with deep and superficial silver wire sutures after the method recommended for the closure of such wounds. By the use of the catheter for a few days and other cleanly attentions to the parts these wounds are soon closed by satisfactory union. It may be stated with much positiveness, that the vast majority of perineal lacerations will give rise to but little subsequent trouble if closed by proper union at the time of their occurrence. Some difference of opinion still exists in reference to the advisability of an early operation for the closure of these lacerations, yet it can hardly be claimed, by those who have given any thought to the subject, that there is an argument based upon a single fact which would favor a delay in the institution of a closure of such wounds. Thomas, Emmet, Goodell, Bantock and other eminent authorities are unanimous in advocating immediate treatment. "In the interest of the profession," remarks Dr. Emmet, "delay in closing the laceration was advisable, but the interest of the patient required that it should be closed as soon as possible after the child was born." "Unless the rent is simply cutaneous or very slight indeed, and not extending much beyond the fourchette," remarks Dr. Goodell, "it should not be left to nature, for nature is here too capricious to be trusted. You must, therefore, make a clean breast of the mishap to your patient, and perform the primary or immediate operation—that is to say you must at once sew up the wound." Dr. Thomas says: "A decided laceration having occurred, if the obstetrician be a man who has familiarized himself with the anatomy and physiology of the perineum, it is difficult to understand how he can doubt the propriety of an early closure of the wound." Dr. Bantock says: "I have no hesitation in affirming that

if the injury were immediately attended to * * * the remote operation would be seldom required and we should almost banish from the list of the gynecologist a number of female complaints, such as cystocele, rectocele and prolapsus ani."

I have here stated the opinions of the highest authorities in gynecology upon this question, men to whose large experience have been presented all of the evil consequences of neglect from non-closure of perineal lacerations by a primary operation. It is not within the scope of this paper to discuss the remote results which follow the destruction of the perineal body. These results have been very carefully studied by Dr. Thomas, of New York; Dr. T. A. Reamy, of Cincinnati (Vol. II *Gynecological Transactions*), and others.

It should be borne in mind that the simplest forms of laceration will fail to heal by first intention unless effected by surgical closure. It is then the duty of the physician to recognize a laceration at the time of its occurrence and to institute such treatment as will induce a primary union; if this be done the part which lacerations take in the induction of bodily and mental disease will be reduced to a minimum account.

I have hastily and imperfectly called attention in this paper to some of the most frequent causes of perineal lacerations and have attempted to set forth the necessary procedures to be considered in the management of the perineum during labor. The subject admits of a wider range of study and of more careful consideration than I have given it.

CONCLUSIONS.

1. The question of "support and non-support" must be determined by the condition of the perineum.
2. An attempt to preserve the integrity of the perineum may, under some circumstances, be attended with

greater injury to both mother and child than a rupture. The lesion of greatest consequence to both mother and child must be considered.

3. The forceps, if carefully used, are of great aid in preventing lacerations, and should be employed to assist in extending and delivering the head when the condition of the perineum strongly opposes or arrests its passage.

4. The administration of ergot before the head has been brought to bear upon the perineum may give rise to violent expulsive effort and force a rupture of this body.

5. Lacerations play an important part in the induction of bodily and mental disease, and should be recognized at the time of their occurrence with a view of determining the necessity for surgical closure.

6. Perineal lacerations, even when simple in character, ought, as a rule, to be closed by primary union.

SANITARY TRACTS, COMPILED FROM MEMORANDA ON PRE- CAUTIONS AGAINST CON- TAGIOUS AND INFEC- TIOUS DISEASES.

BY C. W. CHANCELLOR, M. D.,
Secretary of the Maryland State Board of Health.

NO. II.

PRECAUTIONS AGAINST SCARLATINA AND DIPHTHERIA.

"In every case," says Dr. Seaton, "where scarlatina prevails, or threatens to prevail in a district (as indeed wherever there is prevalence or threatening of any other epidemic disease), it is of more than common importance that both by private action and by action of sanitary authorities, every thing practicable should be done to insure freshness of atmosphere and dryness of soil, and entire absence of dirt, especially in and about houses, and to guard against overcrowding of inhabitants, and to provide that impure water be not drank."

Dr. Alfred Carpenter lays considerable stress on the influence of decomposing vertebrate blood in giving origin to disease, and the development of both scarlet fever and diphtheria in persons exposed to effluvia arising from slaughter houses. Similar opinions are also prevalent in this country among physicians well instructed in the established doctrines of etiology. There can be no question about the contagiousness of scarlet fever and its congener, diphtheria, but it should also be borne in mind that the contagion of these and other diseases *may be developed anew under the influence of certain kinds of effluvia.*

Each patient who has scarlet fever or diphtheria, whether in a severe or in a slight degree, makes around him an atmosphere in which other persons are very likely to become affected with it. Also, when death occurs, the body of the patient, while unburied, continues a centre of infection. The property of infectiousness probably attaches, more or less, to all matters which pass from the body of patients during their disease and convalescence. In diphtheria it belongs especially to those matters which come from the throat and nose, and in scarlet fever from the skin of the patient; the former in foul fluid and solid discharges; the latter particularly represented in the flakes and grains of dry skin, which, after the first week or ten days of the disease, begin to shed in the so-called peeling or desquamation. During the illness of the patient infectious particles of these sorts are plentifully diffused in the air round about him, abound in his clothes and bedding, and may attach, more or less, to all objects in the room. If left to themselves they preserve their infectiousness for very long periods of time; for instance, handkerchiefs which have been used to the patient's mouth and nose, and bedding or clothing, which contain the bran-like dust from his skin, and, in various de-

grees, all things which have been in use in the room, and the dress of persons who have attended him, may, for an indefinite time, be sources of danger. And it is by reason of particles of this kind still hanging about the persons of convalescents, or remaining attached to their clothes that the contagion of scarlet fever is so persistent.

In taking precautions against the spread of scarlet fever and diphtheria, the following rules, as far as practicable, should be observed: Every person, who sickens with the disease, should at once be removed from among the healthy, and if circumstances do not permit of this being done in his own home, he ought to be treated in hospital.*

The room to be used as a sick-room, for either scarlet fever or diphtheria, should be divested of every unnecessary thing to which dust or down is likely to attach. It should be thoroughly well ventilated, directly from and into the open air. Persons in attendance on the sick should be persons who already have had the disease. Between the sick-room and the rest of the house there should be no unnecessary intercourse. In the room, and on the person of the patient, every practicable disinfection should be used without delay. Some strong disinfectant and fluid should always be in use for the various occasions which arise with reference to the discharges and utensils of the sick, and the hands of the attendant. Handkerchiefs, and other like articles, as

soon as fouled by the patient, should be scalded in water or immersed in the disinfectant fluid; bedding and other articles which cannot be thus extemporaneously treated, should be suitably packed and removed to a place where they can be properly disinfected.

The dispersion of contagious dust from the patient's skin is impeded by keeping his entire body (including limbs, and head and face) constantly anointed with oil, vaseline or other grease, which is of advantage to the patient himself. When the patient's convalescence is complete, the final disinfection of his surface should be effected by warm baths, with abundant soap, taken on three or four successive days, till no trace of roughness of the skin remains. Not until this has been done should the patient, however slight may have been the attack, be allowed to associate with persons susceptible of scarlatina. This caution is of particular importance with regard to schools, and the neglect of it when children return to school, after they have had slight scarlatina, is often a principal source of epidemic infection in districts. Intercourse from houses in which there is scarlatina with other houses should not be more than is necessary, and children from infected houses should not be allowed to frequent schools and other assemblages of young people. As milk has been found to be in some instances the means of disseminating the infection of both scarlet fever and diphtheria, special precautions are advisable in the event of the disease appearing in the families of persons dealing in milk.

The bodies of persons dead of scarlet fever or diphtheria should be buried with the least possible delay, and should never, in the mean time, be kept in rooms inhabited by healthy persons. When either of these diseases has ended in a house, the sick-room should be thoroughly cleansed and disinfected.

*When the pressure of a particular epidemic requires temporary extension of the accommodation, tents will be found to answer the purpose admirably. Indeed, it would be a wise precaution against the spread of the disease, if, in every epidemic of scarlet fever, tents were erected in the country, and as many patients as practicable sent to them. Their recovery would also be much more certain and expeditious in the pure air of the country than in the contaminated atmosphere of a city; and such a course would be found not only efficacious but economical.

SUMMARY.

The following are the conclusions which may be drawn from the foregoing statements:

That to prevent or restrict scarlatina or diphtheria, you must avoid their special contagium; beware of crowded assemblies in ill ventilated rooms; keep the grounds in and around your house well drained; do not allow any animal or vegetable matter to decompose on the surface of the ground near your house; avoid the neighborhood of soap factories, slaughter houses, rendering establishments, and other sources of foul odors; keep your house, and especially your sleeping-rooms, well ventilated, your cellar dry and clear of all decomposing vegetable or other substances; do not allow any cesspool near your house; look to your house drains with scrupulous care; see that they are well trapped, kept clean and ventilated into the open air, so as not to permit the entrance of sewer gas into your house; be sure that your drinking water is not contaminated by surface drainage, nor by leakage from drain, sewer, cesspool or vault.

CLINICAL LECTURES.

BRIGHT'S DISEASE WITH COMPLICATIONS—CHRONIC LEAD POISONING.

BY J. M. DA COSTA, M. D., OF PHIL'A.

(Reported for *Maryland Medical Journal*).

This patient, a young colored boy, was brought into the hospital from shipboard. The history of the case previous to its admittance to the wards was far from complete. The boy's urine was found to contain albumen, and he bled considerably at times from his nose. Diarrhœa was also present. Upon examining the abdomen, it was with some surprise that marked evidences of peritonitis were found, while auscultation and percussion of the lungs revealed a pleuro-pneumonia of

a lingering kind, or, more exactly, a pneumonia consolidation with pleurisy. The great question which presented itself for solution in connection with the case was whether the peritonitis and the lung complication were part and parcel of a typhoid fever process, or whether they were the result of something extraneous, such as disease of the kidneys. In other words, were the symptoms mere coincidences or not?

After careful examination I decided that the case was not one of typhoid fever, and that the pulmonary and enteric symptoms were due partly to the depressed condition of the patient's general health, but mainly to disease of the kidneys. The boy gradually got better, the peritonitis subsided, the abdominal tenderness grew less marked, the fever left him almost entirely, the diarrhœa disappeared, and he began to look forward to a rapid convalescence. It was then for the first time that I felt and expressed doubts as to whether the lung trouble was by any means as acute as had been at first suspected. The curving of the ends of the nails, the general cachexia and the unexpected arrival of a certificate showing that this patient's statement of the case had not been a correct one, and that he had been sick much longer than he allowed, all joined in pointing to the probably chronic nature of the pneumonia consolidation and the pleurisy. So, too, with regard to the peritonitis. Another important question also arose: Was there not latent tubercle in the case? This question was based upon the unusual history of the lad, after his admission to the wards. The patient was at length almost in a condition to leave the hospital when, owing to some indiscretion in diet—his friends bringing him something indigestible to eat—grave enteric symptoms developed, and he seemed to sink very rapidly from exhaustion. In a day or two he was dead. At the post-

mortem examination the intestines were most carefully examined, Peyer's patches in particular, without detecting a single lesion of typhoid fever. The peritonitis was found to be not simply an exudation of lymph. A few old tubercles were unearthed from the peritoneum. There were, indeed, evidences of a recent acute attack of peritonitis, but the old attack had evidently been one of tubercular peritonitis. Examination of the *lungs* revealed a chronic pleuro-pneumonia, the lung substance being solidified in places and the pleura thickened. There was no evidence of tubercular disease in the lung substance. One lung was perfectly healthy, except for a slight pleurisy, which had to some extent compressed the lower lobe. The heart was small but healthy. The kidneys showed undoubted signs of chronic tubal nephritis, with commencing fatty changes.

The autopsy sustained my views of the case. The discovery of tubercles in the peritoneum, however, added a new element to the case. Owing to the presence of these tubercles it was not, perhaps, proper to attribute so much to the state of the kidneys. The various complications, pulmonary and enteric, may have all been due to a tubercular state of the system. The case has been a remarkable one at any rate and of unusual interest in a pathological sense.

Chronic Lead Poisoning.—This man is suffering from chronic lead poisoning. He has had severe and constant griping pains in the abdomen, a whitish vomit, very protracted constipation, and suffered from great weakness. His vocal cords are very slightly affected, and there is quite a noticeable tremor in one arm. You are, all of you, no doubt, very well acquainted with the usual symptoms of lead poisoning. I want to call your attention very briefly to some of the unusual ones and their treatment. The wrist drop of chronic lead poisoning

is caused by the deposition of lead in the terminal filaments of the nerves supplying the extensor muscles of the hand. You see how this man's hand falls when I hold up his arm. I put my hand in his and ask him to squeeze it as hard as he can. He has no power at all in his grasp. But now let me take hold of his wrist with my other hand and give it support; you see that he can grasp my hand tightly enough now, in fact, too tight for my comfort. What have I done by grasping his wrist? I have simply taken the part usually performed by the extensor muscles, namely, that of steadying his hand. The lead colic and the change in the pitch of the voice are caused by the deposition of lead in the nerves supplying the abdomen. This chronic state of lead poisoning may irritate the kidneys and develop a slow form of Bright's disease—interstitial nephritis—or it may produce sclerosis of the liver. Very many cases of lead poisoning are preceded by a causeless dyspepsia, with marked cachexia. The treatment of these conditions is: (1) by a saline purgative, such as the sulphate of magnesia which cleans out the stomach and intestines, first throwing down the insoluble sulphate of lead; (2) by iodide of potassium, which reaches and neutralizes the lead already distributed throughout the system; and (3) by galvanism and full doses of strychnia, to tone up the wasted muscles and bring them into play. Where there is very marked wrist-drop splints may be used.

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BILLROTH'S CLINIC.—From January 1st, 1877, to the end of November, 1880, there were 91 greater amputations and enucleations done at Billroth's clinic, being an annual average of 23, and of 3.2 per cent. of all the patients treated. Antiseptic precautions were adopted in every case. Seventy cases were cured, 3 remained uncured, 18 died.—*Wiener Medizin*

SOCIETY REPORTS.

THE DOCTORS' OPENING OF
THE YORK HOSPITAL AND
DISPENSARY, AT YORK,
PA, APRIL 28th, 1881.REPORTED BY W. STUMP FORWOOD, M.D.,
DARLINGTON, MD.

In response to the pressing invitation of Dr. W. S. Roland, the President of the hospital, and of our excellent friend, Dr. S. J. Rouse, the efficient Secretary of the *York County Medical Society*, we were present at, and participated in, the ceremonies of the formal "Doctors' Opening" of the York Hospital and Dispensary, on Thursday, April 28th, 1881.

A considerable number of medical men—perhaps sixty or more—with nearly the same number of ladies from several adjoining counties in Pennsylvania, were present on this interesting occasion. The members of the medical societies of Cecil and Harford Counties, Maryland, were also invited; but Dr. A. A. Hanna, of Cecil, and Dr. W. W. Virdin, and the writer, of Harford, were the only representatives in attendance from Maryland. We were received, however, with extreme cordiality, which amply compensated us for our visit, and made us feel most heartily welcome.

The hour of meeting was fixed at 12 o'clock, noon, and the time for adjournment at 4.30 P. M.; so arranged as to suit the arrivals and departures of the various railroad trains, in all directions, in order that every guest might arrive from, and return to, his and *her* home on the same day.

We arrived, by the way of Port Deposit and Columbia R.R., in York at 11.35. The guests all reached the hospital about noon; and, after a general interchange of the congratulations of the day between many old friends, and the introductions of those not previously acquainted, dinner was announced a few minutes after 12 o'clock, as the first "order of business" on the programme.

In passing, we should explain that the dinner, in an unusually handsome style, for such occasions, was served at the hospital, and at the expense of the hospital authorities, or of the *York County Medical Society*, in regard to which we

were not informed; but was certainly without money and without price to the visitors. This preliminary, and important feature of the occasion, was finished about half past one, when the following Programme was immediately commenced and uninterruptedly continued to its conclusion:—

1. Organization of the Meeting, Dr. A. R. Blair, President.
2. Prayer, Rev. Dr. A. H. Lochman.
3. MUSIC.
4. Words of Welcome, Samuel Small, Esq.
5. Origin of the Hospital, Dr. W. S. Roland.
6. Address, Dr. John L. Atlee, Lancaster.
7. MUSIC.
8. Our Guests, Dr. J. W. Kerr.
9. The Ladies, Dr. J. L. Ziegler, Mt. Joy.
10. Hospital Duties, Dr. J. H. Brinton, Philadelphia.
11. Care of the Sick, Dr. W. Stump Forwood, Darlington, Md.
12. Our Profession, Dr. Alex. Craig, Columbia, Pa.
13. Code of Medical Ethics, Dr. H. Alleman, Hanover, Pa.
14. Advantages of Medical Societies, Dr. P. A. Hartman, Harrisburg, Pa.
15. A Doctor's Life, Dr. S. B. Keiffer, Carlisle, Pa.
16. MUSIC.
17. BENEDICTION.

The above programme was carried out in full, with the exception of the part assigned to Dr. J. H. Brinton, of Philadelphia, who was unavoidably absent, but who sent a letter of regret, a considerable portion of which, relating to "Hospital Duties," was read by Dr. Roland.

The remarks of each speaker, except those of Dr. Roland, on the "Origin of the Hospital," which were necessarily more at length, occupied about five or ten minutes. The music, at intervals, which was excellent, and by a string-band, filled about the same time, so that the apparently lengthy programme was very readily completed at the hour of half past four o'clock.

Mr. Samuel Small, of York, who, as we learned from Dr. Roland's remarks upon the Origin of the Hospital, was

the original suggestor and the chief, if not the sole doner, of the Hospital grounds and buildings, is an elderly gentleman of 82 or 83 years of age. He is a tall, and fine looking man; and, although evidently unaccustomed to public speaking, he delivered a few very well-chosen and very pleasant "Words of Welcome." His agreeably animated, smiling countenance, while speaking, won the hearts of his hearers, and unmistakably betokened the kind and benevolent disposition of his nature. It appears that he has founded several other charities in York previously, and is respected and revered by all who know him in the town where his long and most useful and successful life has been spent. With him it is undoubtedly "more pleasure to give than to receive." Thousands of hearts will sincerely mourn, when, finally, this good man's days shall draw to a close; and thousands yet unborn will bless his memory for the benefits they shall obtain from his far-reaching benevolence.

Dr. John L. Atlee, the great surgeon of a wide circle, extending, in some instances, to the far West—where he has received as high as fifteen hundred dollars for a single operation—ovariotomy—delivered a very happy, extempore Address, complimenting the surgeons and physicians of York upon the acquisition of a hospital—an almost indispensable requisite to professional training and success at the present day. He dwelt particularly upon the advantages of such an intitution for the indigent sick, which accrued largely to the benefit of the town where located. He referred also in kindly and most complimentary terms to the aged benefactor, Mr. Small, whom he had known most intimately nearly all his life, there being only about four months' difference in their ages. Dr. Atlee mentioned the fact that his first acquaintance with York, then a very small borough in comparison with its present extended area, began in his eleventh year, when his parents sent him there for the advantages of a school, which he attended with pleasure and profit for several months,—a portion, as now recalled, of the happiest days of his life.

Mr. Small was one of his school-fellows

in those early days; and, in now looking over this large and thriving town (14,000 inhabitants) and in reviewing the pleasant memories of those happy days, with the friends and acquaintances of the olden time, in which were included nearly all of the residents of York during his youthful sojourn, now, alas! not one remains to greet him to-day, with the single exception of Mr. Samuel Small!

Dr. Atlee's remarks were received by his attentive auditors as words of wisdom from the lips of a recognized sage. It was interesting to observe, as we had the opportunity of doing, how the countenance of Mr. Small, previously somewhat sedate and meditative, lit up with animated interest, when Dr. Atlee began speaking; and it was evident that he eagerly caught every word, with sympathetic response, that fell from the lips of his ancient friend—the only survivor of his early days.

Dr. Kerr extended a very hearty, off-hand welcome to "Our Guests," and was particularly kind in his greeting to "our Maryland friends," laying the accent on the first syllable, designedly, as he said he loved to do; and, at the same moment, slapping his hand affectionately upon the shoulder of one of Maryland's representatives, who happened to sit near him. Such a reception cements the warmest feelings of brotherhood.

Dr. Ziegler, of Mount Joy, Lancaster Co., spoke to "The Ladies" in his usual felicitous and happy style; and it was plainly observable that they fully appreciated our good friend's expressions of respect, honor, and affection.

Dr. Craig, of Columbia, did great credit to himself in so ably presenting the claims of "Our Profession."

The "Code of Medical Ethics" was briefly yet cogently offered to the consideration and digestion of the audience by Dr. Alleman, of Hanover, Pa. *Multum in parvo.*

Dr. Hartman, of Harrisburg, also presented, in a very clear light, the "Advantages of Medical Societies."

The crowning effort of the day, however, for pleasant instruction, and mirthful entertainment, was very properly reserved for Dr. S. B. Keiffer, of Carlisle, whose duty it was to conclude the

ceremonies, with the exception of music and the benediction. The theme assigned him was that of "A Doctor's Life." He began, in rather a sober way, to refer to the subject—the *vastness* of the subject, as he said—yet, withal, an under current of humor was perceptible to those acquainted with him before it became apparent to others. In referring to the five-minute rule, to which remarks were generally limited, he asked what an audience could expect him to say, within the short space of five minutes, upon such a boundless, varied and intricate subject as that of "A Doctor's Life." It was preposterous, he said, to think of such a thing!

Dr. Atlee immediately arose and moved that Dr. Keiffer be allowed *twenty* minutes. This motion was carried unanimously, and accompanied with loud applause.

The Doctor proceeded, with inimitable humor, to picture what he imagined to be the kind of "life" led by various specimens of humanity that by accident or design manage to get into the medical profession, not omitting the women Doctors. At one or two points, near the conclusion of the Doctor's humorous remarks, he was applauded, in the wildest merriment, time and again, and in the most boisterous manner, altogether out of character with the sober. (for no wine was used on this occasion) staid and dignified profession represented.

Dr. Keiffer's remarks certainly had the effect of removing, for the time being, at least, a considerable portion of the load of care and anxiety that weigh upon and becloud the "Doctor's Life," so far as those present were concerned.

This episode effected a very happy close to this exceedingly agreeable and interesting meeting.

These social meetings among physicians are extremely salutary in their results, and should be cherished by the profession as the beautifully bright and green spots amid many that are dark and cheerless in "A Doctor's Life."

A CASE is reported in the *Lancet*, April 9th, of maternity at nine years of age. The child-mother has menstruated from her first year, and was a full-formed woman at nine.

REVIEWS & BOOK NOTICES.

Medical Electricity: A Practical Treatise on the Applications of Electricity to Medicine and Surgery. By ROBERTS BARTHOLOW, A. M., M. D., LL.D., Prof. Mat. Med. and Gen'l Ther. in the Jefferson Medical College. With 96 illustrations. Phila. Henry C. Lea's Son & Co. 1881. Pp. 262.

To the great bulk of the medical profession, electricity is a *terra incognita*, the entrance of which—to say nothing of its exploration—offers almost hopeless obstacles. The younger members of the profession are debarred admission by the expense involved in supplying themselves with the requisite and costly apparatus, whilst the technical difficulties inherent in the subject itself have deterred others who possess the means. Of course the want of means cannot be supplied; the other difficulty can be met—it has been met in the volume before us. The work is based upon the idea that there are those who are entirely unacquainted with the subject, and hence deals with it in the simplest and most elementary manner possible, being at the same time so comprehensive and condensed as to embrace all that is essential in regard to it. No attempt has been made to traverse the vast field of electrical science, which has developed of late to such huge proportions; only such knowledge of its fundamental principles is given as will enable the student to comprehend the mechanism and results of the apparatus to be employed.

Naturally, in this country, we look most to practical results. To those who are not posted upon this subject, the extent to which electricity is applied in medicine is astonishing. We can only pass briefly in review of its use in the *diagnosis* of diseases of the muscles, nerves and nerve centres, of hysterical paralysis, and of feigned diseases; to the treatment of cerebral,

psychical and spasmodic diseases, of paralyses, pain, of constitutional diseases, of various local affections, of neurosis, and even of dropsy, of surgical diseases, as aneurism, tumors, by galvano cautery, the electric laryngoscope, etc.

If the value of a work is to be judged by the extent of its usefulness, there are few, if any, that can claim more consideration, than this, the latest production of this prolific author. So far as we know, the need of a clear, simple, untechnical, reliable, concise, and modern treatise upon the subject of medical electricity is only supplied by the volume under consideration. It is not too much to say that, if availed of, it will render accessible to a vast number of members of the profession a therapeutic agent of the greatest value, but which has heretofore been practically of no use whatever to them.

Lectures Upon Diseases of the Rectum and Surgery of the Lower Bowel.

By W. H. VAN BUREN, M. D., LL.D.
New York. D. Appleton & Co.,
1881. Pp. 403. \$3.00.

This volume is made up of series of lectures delivered at the Bellevue Hospital Medical College. These lectures were given to the profession some time back, and are more or less familiar to those interested in surgical studies. The present volume has been largely re-written and much new matter introduced, mainly in the shape of opinions and cases, from authentic sources, which the author's own experience has led him to select for their value in illustrating the present state of knowledge. The subjects treated in these lectures are frequently met with in practice—thus hæmorrhoids, fistula in ano, strictures and cancer of the rectum are clearly and fully presented; the two first named, especially, giving rise to much inconvenience to patients, and calling for very judicious and careful manage-

ment upon the part of the surgeon. The author of these lectures is the very highest authority upon these subjects, and his opinions are entitled to consideration. We commend this book to the profession.

An Introduction to Pathology and Morbid Anatomy. By T. HENRY GREEN, M. D., London, Fellow of the Royal College of Physicians, London, etc. Fourth American Edition. Henry C. Lea's Son & Co., Phil'a. 1881. Pp. 342.

This is one of the best known books upon pathology and morbid anatomy in the language, and is so familiar to the profession that a review is not called for. The mere announcement of a new edition is all that is necessary at our hands.

It may, however, be proper to state that the author has added some new matter with the object of making the work a more complete guide for the student. He has also revised the chapters and made some alterations in the arrangement of the text. A number of wood cuts have been added, giving a total of one hundred and thirty-eight fine engravings.

BOOKS AND PAMPHLETS.

"The Development of the Osseous Callus in Fractures of the Bones of Man and Animals. By HENRY O. MARCY, A. M., M. D. Cambridge, Mass. Reprint. 1880. Pp. 20.

Cæsarean Section with Removal of Uterus and Ovaries After the Porro-Muller Method." By ELLIOTT RICHARDSON, M. D. Philadelphia. Reprint from *Am. Jour. of Med. Sciences*. January, 1881. Pp. 11.

"Myopia in its Various Phases." By J. J. CHISOLM, M. D., Baltimore. Revised from September number, 1880, *Virginia Medical Monthly*. Pp. 32.

Bulletins of the Public Health. Issued by the Supervising Surgeon-General under the National Quarantine Act. Government Printing Office. 1881. Pp. 133.

"Trance and Trancoidal States in the Lower Animals." By G. M. BEARD, A. M., M. D., New York, W. L. Hyde & Co, Printers. 1881. Pp. 17.

"The Personal Factor in the Etiology of Preventable Disease." By ALFRED LUDLOW CARROLL, M. D., New Brighton, N. Y. Reprint. 1880.

EDITORIAL.

WORK IN MEDICAL SOCIETIES.—A good amount of valuable time is wasted in medical societies by discussions which are kept up with the view rather of hearing oneself talk, or of appearing as a zealous society worker, than with a purpose of adding to the real profit of the debate. Lengthy and irrelevant debates frequently consume valuable time, and serve, in no small degree, to disgust and bore those who attend the society meetings with a desire of deriving a benefit. There is no sense or reason in this way of killing time. Men who come to these meetings to assume the rôle of bores should be treated as such, and not be allowed to impose upon those who really desire to learn. There is no excuse for idle, haphazard, debate in a medical society. The majority of such societies have issued cards announcing the programme for each meeting. It is the duty of the members to confine their remarks to the subjects thus announced and to prepare in advance for the discussions if they have any desire to take part in them. This habit of preparation will be found of great value to every member, and will insure an intelligent discussion of a subject under consideration. It is a habit easily formed, and should be adopted by every society member. It would be a good rule for each member to adopt a resolution not to take part in a discussion without previous preparation, or at least without a decision as to the character of remarks

he proposes to make. A few men may draw on a large experience for subject-matter for an impromptu debate, but even this number would add to the effect of their remarks by previous consideration and arrangement. A medical society is, in one sense, an experience meeting, but differing decidedly from the experience meetings of religious bodies, which it is often made to imitate. In medicine we have the basis of fact; for consideration, and men should confine their remarks to conclusions drawn from a careful study of facts. Experience is of value when it has been obtained by correct methods of study and observation; when it is not based upon mere impressions and ideas, which steal upon the mind undemonstrated by actual and close test.

We wish to protest against the manner in which many of the debates in medical societies are often conducted, from the American Medical Association down. Much valuable time is squandered in idle talk and jargon, or if analysed it will be found to be little else—to the great detriment of the influence and value of these bodies, which have in view a higher mission of usefulness.

SANITARY VISITATION.—The tour of the State, now being made by the efficient Secretary, Dr. Chancellor, under the auspices of the State Board of Health, is pregnant with great good to the public interest and the public health. Outside of the City of Baltimore, very little attention has been given in Maryland to the subject of sanitation. Cultivated with such glorious results in England, and in some of the Northern States of this country, the question of hygiene has gradually assumed a supreme importance. If the welfare of the individual demands our care how much more that of whole communities. There is ample scope for the labors of the sanitarian in Maryland, embracing as it does within its borders such a great variety of soil and climate. There are questions such as the nature and prevention of malaria, the disposition of sewerage, the relation of various manufacturing industries to the public health, the hygiene of towns, the pollution of streams, registration of births and deaths, and, above all, the education of the people in regard to

this whole subject, that equally demand attention. Dr. Chancellor is entering into this work with most commendable zeal. He is visiting the various counties of the State, delivering addresses in the towns upon sanitary subjects, which addresses are being published in the papers, thus obtaining the very widest circulation; and organizing local boards of health composed partly of medical men and partly of prominent officials and citizens of the respective localities, to coöperate with the State Board. We urge upon the members of the profession throughout the State to give a hearty support to these efforts, and not let it be said they failed of their full effort—if fail they should—on account of any lukewarmness on our part.

MISCELLANY.

WRITER'S CRAMP.—This and allied defects, from overuse of certain muscles, are more successfully treated by galvanism than by any other means. With galvanism must be conjoined rest and systematic gymnastic training. Indeed, without rest, no improvement can take place in the condition of the affected muscles. The state of the muscles in writer's cramp varies in different cases. There may be cramps of the muscles concerned in the prehension of the pen; there may be a condition of fatigue and exhaustion, or some of the muscles may be paretic. Some of the cases are local and muscular; some are local and nervous, and a small proportion have their origin in intra-cranial lesions, in changes in the motor and coördinating centres. It is obvious that the treatment must be adapted to the conditions present. As most of the cases are due to muscular fatigue and cramps, the most appropriate remedy is galvanism, but this must be conjoined with rest, massage and gymnastics. The anode should be placed over the cervical plexus, and the cathode brushed over the muscular groups in turn from the shoulder

down. If the defect is confined to the thumb and finger muscles, to the thenar group, the interossei, and flexors of the fingers, the applications should rather be confined to those parts and consist in the descending labile current. If the lesion consist in relaxation, paresis and degeneration of any of the muscles, faradism may then be employed with advantage. Duchenne's electrodes are best adapted to cases requiring application to individual muscles. Those affected must be selected out, and a current, of strength necessary to induce contractions merely, passed through them. Under no circumstances ought the muscles be tired, either by the strength or duration of the applications. Treated in accordance with these principles, recent cases of writer's cramp may be cured or ameliorated.—*Bartholow's Medical Electricity.*

SPECIALIZATION IN PRACTICE.—There is an inevitable, semi-conscious tendency to the cultivation of specialties in medicine, and nearly all of the men from among whom hospital physicians are, or should be, chosen are quasi specialists, i. e., they have studied with care and feel an interest—a real scientific interest—in a limited number of diseases, and, in proportion as they increase their knowledge and skill in this special direction, they become less competent to deal successfully with other diseases. The system of short changing services forces all patients to submit to a succession of variously qualified physicians, and obliges a physician to try to treat all sorts of diseases or tempts him into neglecting many of the patients placed under his care. The system does not recognize the fact, the hard and undeniable fact, that all intelligent and scientific physicians are quasi specialists, and must be. In the present development of medical science there is no alternative; a physician must be a quasi specialist, or possess a universal

knowledge of a superficial, mostly booky kind, a knowledge wholly insufficient to ensure intelligent or successful practice.—*E. C. Seguin in Archives of Medicine, April, 1881.*

PROMOTION—Dr. Wm. C. Boteler, formerly of this State, but at present residing in St. Joseph, Mo., has lately been elected Professor of Chemistry and Histology in the St. Joe Hospital Medical College.

Dr. Boteler has contributed frequently to this JOURNAL, and will be remembered by the JOURNAL readers. He is a graduate of the University of Maryland, and for one year was a resident student in the Baltimore Infirmary. After graduation he studied at the Johns Hopkins University, in this city, and subsequently attended lectures at the Jefferson Medical College, Philadelphia. He received an appointment from the Department of the Interior as physician to Otoe Agency in Nebraska, which position he has recently resigned to enter upon a wider field of practice in St. Joseph.

We congratulate the doctor upon his elevation and wish him the success his industry and talents merit. Being a Marylander, and a former pupil of ours, we shall watch his successful career in the West with interest and pride.

SWALLOWING OF THE TONGUE.—Dr. E. Fletcher Ingalls, of Chicago, reports a case of this rare affection, which occurred in a hysterical female. Two days after an attack of hysterical convulsions, shortly after taking soup, there was an eructation of gas and fluid from her stomach, instantly followed by suffocation, which lasted for some time and nearly proved fatal. Three days later, two less severe attacks occurred, one with, the other without eructation.

During this time the patient was extremely nervous, with constant fear

of impending death and greatly prostrated by the suffocative attacks.

Spasm of the glottis, from the entrance of matter ejected from the stomach gaining entrance into the larynx, was excluded by absence of sensation of constriction, or of foreign substance in the larynx, or of cough or stridulous breathing.

The patient complained of a sensation of extreme thickness of the base of the tongue, and inability to control its movements, preceding the suffocative attacks.

On the occurrence of the attacks, breathing was instantly and completely checked, and the throat seemed completely filled; after several frantic efforts, the tongue would resume its natural position in the mouth, and respiration would go on without impediment.

Subsequent attacks were prevented by the patient passing her finger over her tongue and drawing it forward.—*Archives of Laryncology, April, 1881.*

CANCER OF THE UTERUS IN NEGRO WOMEN.—Dr. T. Gaillard Thomas, in a clinical lecture on Sub-peritoneal Uterine Fibroids, published in the *Boston Medical and Surgical Journal* May 12, 1881, says: "It is a remarkable fact that negro women never have cancer of the uterus, and yet, as I have mentioned, they almost invariably have uterine fibroids. Some time ago there was a discussion in the journals on the subject of uterine cancer in the negress, and a distinguished medical professor, of Charleston, S. C., a gentleman of immense experience in diseases of women of the African race, then stated that he had never seen a single instance of it. As another point of interest here, I may mention that although I have had the opportunity of examining a vast number of cases of ovarian cyst, I have never yet met with a single instance of it in the negress.

QUININE AMAUROSIS.—Dr. E. Gruening, after reporting a case of this, and reviewing very briefly the limited literature of the subject, concludes thus:

On reviewing the unequivocal cases of quinine poisoning with amaurosis (Roosa, Wecker, Voorhies, Gruening), we find a remarkable congruence in their essential features. The patient, after the ingestion of a single dose or of repeated doses of quinine, in varying quantities, suddenly becomes totally blind and deaf. While the deafness disappears within twenty-four hours, the blindness remains permanent as regards peripheric vision, central vision gradually returning to the normal after some days, weeks or months. The ophthalmoscope reveals an ischaemia of the retinal arteries and veins without any inflammatory changes. In view of the constancy of these symptoms and the uniformity of the ophthalmoscopic picture, we are entitled to demand for this distinct type of amaurosis a recognized position in the pathology of the optic nerve and the retina.—*Archives of Ophthalmology, March 1881.*

CONTRIBUTION TO THE SUBJECT OF TUBERCLE INHALATION.—Bertheau instituted at the Pathological Institute, at Kiel, some experiments upon this point, mostly upon dogs. The animals were confined, about an hour each, in an apartment into which liquids containing tuberculous matter were introduced in the form of a spray. In five cases, in which the sputa of phthisical patients were used, there was invariably found—on killing the animals 17 to 20 days after the inhalation—a tolerably abundant development of gray miliary tubercles in the lungs, which presented all the anatomical features of genuine tubercles. The other organs were perfectly normal, and the animals exhibited no signs of sickness during life. In one case, in which sputa of pneumonia and bronchial catarrh were employed,

the result was after five weeks negative, there being only at separate points, visible under the microscope, interstitial cell growths of limited extent.

Also in animals killed during the first week after the inhalation the condition was perfectly normal.—*Deutsches Archiv. f. Klin. Med., and Centralblatt, April 23rd.*

LUMBAGO.—This affection is usually promptly cured by galvanization of the affected muscles. In my experience in this class of cases, strong currents are most beneficial; attacks resisting the current from 15 to 20 cups of Siemens and Halske have promptly yielded to 40 to 60. The applications should be made twice a day from the first few days, and afterwards daily until a cure is effected. Immediate relief is afforded by the passage of a current, the patient being able to straighten himself at once without pain, but in the intervals he lapses back into his former condition, nearly; but the repetition of the applications is followed by an increasing duration of the relief. Recent cases are sometimes cured by a single application. The best results are obtained by transverse currents.—*Bartholow's Medical Electricity.*

BULLETIN OF MEDICAL SOCIETIES.—

Clinical Society of Md.—The next meeting will be held Friday, June 3rd, at 8 P. M. Dr. Coskery will read a paper on "Two Cases of Scorbutus," and Dr. Miles one on "Neuritis;" Dr. I. E. Atkinson will exhibit a case of "Lupus Vulgaris;" Dr. Winslow will open the discussion on "Chopart's Amputation.

Academy of Medicine will meet June 7th, 8.30 P. M.

Med. and Surg. Society meets Wednesdays, 8.30 P. M.

The *Med. Association*, and the *Section on Obstetrics and Gynecology, M. and C. F. of Md.* have discontinued their meetings for the season.

COMPLETE EXTIRPATION OF PHARYNX, BASE OF TONGUE AND VELUM PALATI.—C. A. Caselli, of Bologna, reports the case of a girl of 19, with an extensive granuloma (eymphosarcoma?) of the larynx, which had extended to the other parts named, who was cured by extirpation of all the affected parts. The operation was done, for the most part, with the galvano-caustic knife, and lasted more than three hours; there was, however, but little loss of blood. The patient recovered the power to swallow solid as well as liquid food, and regained pretty good speech by means of an apparatus, which offers advantages over the artificial larynx of Gussenbauer.

RECTAL ALIMENTATION.—Cattillon fed a dog weighing 9 kilograms, allowing him only to drink water, for 40 days, by clysters, thrice daily, of 2½ eggs diluted with a spoonful of water. Under this the dog continued lively, but lost three kilograms in weight and the temperature in the rectum fell from 39° to 38°. He then replaced the eggs by defibrinated blood, whereupon the animal became very cachectic and died in 10 days, the temperature having meanwhile sunk to 35°, and the weight having diminished another kilogram.

A second dog, weighing 10 kilograms, received, in addition to the eggs, 6 gm. pepsin-glycerine, losing during the first 6 days of this diet, 750 grms. (no more, as C. thought, than any such animal would lose, on being subjected to confinement in the laboratory and to a changed mode of life), after which he lost no more, but remained lively for 37 days. The clysters were then continued for 15 days without the pepsin-glycerine, under which there was a diminution in weight of 2750 gm. Clysters of defibrinated blood were then employed, in consequence of which the weight fell to 6 kilograms and the animal died in 14 days.—*Centralblatt April 9th, from Gaz. Hebdomadaire.*

MANAGEMENT OF MENTAL AND NERVOUS DISEASES.—I am persuaded that, in a moderate way, greater harm is being done to persons with acute nervous temperaments, by the use and abuse of coffee and tea, than by any other agents. Coffee and tea may be regarded as pure nerve stimulants; they are not tonics in any proper sense of the word. They excite the nervous activities, and hence hasten the expenditure of nerve substance and nerve force, but do not quicken or stimulate the nutritive activities, upon the proper performance of which the perfection of nerve structure and the acquisition and maintenance of a normal degree of nerve power depend.

When there is already a lack of nerve power, and abnormal acuteness of nerve sensibility, all agents and influences should be avoided which excite needlessly the activities of the nervous system, for the result is simply nerve exhaustion.

That such is, upon the whole, the action of coffee, and, in perhaps a less degree, of tea, I have not the slightest doubt. Therefore, in all cases, where the nervous system is naturally highly sensitive or disposed towards neuralgias, or to irregularities in vaso-motor action, and in the vast majority of cases of neurasthenia, I have found it a matter of great practical importance to forbid the use of coffee and tea, or, if they are used, to insist that the infusions shall be weak.—*J. S. Jewell, in Archives of Medicine, April, 1881.*

SMELL OF DEATH.—Professor A. B. Isham, of Cincinnati, draws attention to a peculiar characteristic odor emanating from the bodies of persons in the act of dying. It somewhat resembles musk. Of two cases cited, in one it was observed 33 hours before death, in the other 1½ hours. He attributes the odor to the liberation of ammonia and a volatile oil from the blood.—*Am. Journ. Med. Sci., April, 1881.*

OBITUARY.

DEATH OF DR. M. J. DE ROSSET.—

It is our sad duty to chronicle the death of this eminent physician, which occurred on the 1st inst., in his native city, Wilmington, N. C. Dr. De Rosset had many friends and admirers in this city, where he resided for several years after the close of the war. He held an adjunct professorship in the University of Maryland, and delivered a brilliant course of lectures in that institution on Urinary Analysis, which it was the privilege of the writer to attend. At the same time his talents commended him to Prof. N. R. Smith, who selected him as one of the instructors of his private medical class. He also took an active part in the proceedings of the Pathological Society, which represented the best elements of the profession here at that time. About nine years ago he moved away from Baltimore, and has since that resided chiefly in New York, devoting himself especially to Ophthalmic and Aural Practice, and editing, in association with Dr. T. F. Wood, the *North Carolina Medical Journal*. He died whilst still in the prime of life and usefulness. He possessed talents and attainments of a high order, and was an amiable, refined and high-toned gentleman.

DEATH OF DR. J. WM. WALLS.—

Dr. J. Wm. Walls, a well known and highly respected physician, of this city, died in Philadelphia, very suddenly, on May 19th. Dr. Walls was born in Harper's Ferry, Va., in 1835, but was reared in Newtown, Frederick Co., Va. He received his academic education in Winchester, Va., and subsequently studied medicine, and graduated at the Winchester Medical College, a school so ably conducted by the late Dr. Hugh McGuire, a distinguished and wide known surgeon.

Dr. Walls was elected to the chair of Anatomy and Physiology in this school and ably filled this position until the breaking out of the war, when the school closed. He then entered the Confederate army, and became surgeon to one of the divisions in Stonewall Jackson's corps, remaining in service during the entire war. He enjoyed a very large army experience, and established a fine reputation for surgical skill. After the close of the war, he came to this city and became associated in practice with Dr. J. E. Clagett. He held for a short time a chair in the Washington Medical College, but being in feeble health resigned his connection with the school to devote his entire attention to private practice.

Dr. Walls had a very quiet and diffident nature, and avoided publicity of every character. He was best known to a circle of intimate friends who had free access to his warm and generous heart, and could appreciate his many noble qualities of heart and mind. He was thoroughly up in his profession, and possessed a large stock of general information on literary and scientific subjects. He had been an earnest and zealous worker in his profession, and, but for impaired health, would have made a wide and distinguished reputation as a surgeon. His surgical experience has never been published, but it was large, varied and successful. In the death of Dr. Walls the profession has lost a member who faithfully advocated and practiced its best and truest principles. He was a man of strict integrity, and practiced his profession as a sincere, candid and manly nature dictated. As among those who knew him well, we can bear tribute to his warmth and sincerity as a friend, to his kindness and gentleness towards the sick, and to his skill, experience and culture as a physician.

MEDICAL ITEMS.

THE American Surgical Association, at the recent meeting in Richmond, elected the following officers for the ensuing year: Dr. S. D. Gross, president; Drs. L. A. Dugas, first vice-president; J. R. Woodard, second Vice-President; J. W. Weist, recording secretary; W. D. Briggs, corresponding secretary; J. H. Packard, treasurer. Place of meeting, Oriental Hotel, Coney Island, N. Y., 13th, 14th and 15th of September.—The thirty second annual meeting of the Medical Society of Pennsylvania met at Lancaster, May 11th, and was a most successful and encouraging meeting.—A medical club was started in Philadelphia on the first of the year with a membership limited to one hundred. It has secured a very convenient house in the centre of the city, and is very popular with the younger members of the profession. A similar club was organized in this city about the same time, which meets at the residences of its members. It is popular with the older members. Beer and cold water are the beverages ordinarily, but the former is omitted occasionally through deference to the wishes of several members, who advocate temperance principles. It is a "feast of reason" rather than "flow of soul."—Since November, 1880, there have been nearly 5,000 cases of small-pox in Philadelphia, of which, 1,000, or one in five, died.—The Clinical Society of Maryland has nearly doubled its membership during the past year. It is very largely attended and is one of the most active and efficient medical societies in the country.—Dr. Charles Magill, formerly a resident of Hagerstown, Md., and well known in this state, died in Richmond, Va., early in May, in the 75th year of his age.—The displays of pharmaceuticals, etc., at the meeting of the American Medical Association in Richmond, this year, were extensive and

attractive, and evidently appreciated by the doctors, many of whom returned home loaded with samples enough to run them until the next meeting. Among the firms giving handsome exhibits we may mention: Messrs. Parke, Davis & Co., H. C. Lea's, Son & Co., Trommer Extract of Malt Co., Chas. T. White & Co., J. F. Hancock, McIntosh Galvanic Battery Co., New York Pharmacal Association, and other well known firms.—Since the first unsuccessful extirpation of the pylorus, Prof. Billroth has operated on two other cases in a like manner, both with fatal results.—A New York physician having changed his office, left a sign stating his removal. The landlord, not being on good terms, painted under the sign, "For which we are truly thankful." The doctor had the landlord arrested.—In the New York Asylum for Lying-in-Women there were 94 births during the past year, and 496 confinement cases were attended to at the homes of the patients.—A writer in the *British Med. Journ.* says two or three grains of ergotine injected hypodermically are very efficacious in relieving cough.—Dr. Chas. K. Mills has been appointed Lecturer on Mental Diseases in the University of Penn'a.—The Medical Society of the county of New York has begun active legal proceedings against illegally registered or unqualified medical practitioners by the arrest of two persons, who are accused of practicing medicine without physicians' licenses.—The sanitary condition of New York City is shown by the mortality list for the first four months of 1880 and of 1881. During this period in 1880 there were 9,266 deaths, and during 1881 12,420 deaths.—Dr. Ferdinand Colletti, Professor of Therapeutics at Padua, died a short time ago. He was cremated at Milan with high honors.—Sir Wm. Jenner has been elected President of the Royal College of Physicians of London.

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ORIGINAL COMMUNICATIONS.

CLINICAL LECTURES.

A CLINICAL LECTURE AT BELLEVUE HOSPITAL.

BY WILLIAM H. THOMSON, M. D.,

Professor of Materia Medica and Therapeutics
in the University of the City of New York.

NO. III.

(Reported for *Maryland Medical Journal*).

Gentlemen:—At our last two lectures we were considering the numerous signs of phthisis, other than those derived from physical exploration. We spoke of the general aspect of a patient with this disease, of his emaciation, of the appearance of the eyes, the face, the mucous membranes, the neck, &c. We observed that when we question him with regard to the commencement of his trouble, his story rarely can be relied upon, for he will tell you that it began with a cough only a few weeks previously, due, as he says, to the taking of a cold. Finally, we were considering the expectoration in phthisis, and upon this let us dwell a little more at length.

The expectoration should be noted in this disease more carefully than in any other pulmonary affection, for so much may be learned from it, that the sputa ought to be inspected in phthisis as carefully as is the urine in a case of suspected Bright's disease. In both instances we have secretions coming directly from diseased organs, and both, therefore, should be examined for the same purpose, viz.: to come to some conclusion as to how far the organ, from which the secretion comes, has become involved in the morbid process.

We remarked, I believe, in our last lecture, that the expectoration of the first stage of phthisis is always mucus, very clear mucus; and that there is intermingled with it a great deal of air and very little else. It is very stringy, and hence has the characters of the expectoration of the first stage of ordinary bronchitis—not of the second or third stage of bronchitis. When a bronchitis begins to resolve, to get better, its secretion changes from a viscid mucus, difficult to bring up (and on that account getting into it bubbles of air), to a mucus of a

more fluid character, which runs easier, and which contains particles of material of a yellowish color, indicative of cell formation. Now, as the disease becomes more and more resolved, you will find the pus increased in amount, and more matted together, forming lumps, and surrounded by a viscid mucus. If it is a case of simple bronchitis the mucus will decrease in quantity, and the lumps of expectoration will cease after awhile altogether. But this expectoration of the first stage of bronchitis, namely, a clear viscid material, is present for a long time in phthisis, lasting for weeks and months, and hence is very justly regarded as a dangerous sign—not *per se*, because it belongs to simple bronchitis, but only because when persistent, it implies the existence of the graver disease. Though moderate in amount it is an ugly symptom, as just said, because, by and by, there will come up along with this clear viscid material, little, well-defined, yellowish streaks, like pus. These yellowish particles are not large; they will constitute, perhaps, one-third or one-fourth of a single expectoration, being stringy in appearance, not round but elongated, and sharply defined from the rest of the expectorated matter, which is still clear. Now, if you take some of this yellow matter and dissolve it in water, separate it, and examine it under the microscope, you will make certain the diagnosis of phthisis; you will find little strings that look like threads, yellowish in color, perfectly defined, cylindrical, and rolled upon themselves. These are pieces of lung tissue, derived from its yellow elastic fibres, and indicate that the walls of the air vesicles are commencing to break down and to be expectorated. They are just as distinctive, if not more so, of the destructive effect of phthisis upon the lungs, as are casts in the urine, of organic affections of the kidneys.

Then comes finally the expectoration, which is supposed to be characteristic of cavities. Niemeyer says it is pathognomonic; that it always means cavities. Other authorities dispute it, and say it is present in chronic bronchitis as well. It contains what are called globular masses; very large, opaque, rounded, yellowish masses of sputa, found in quite a quantity of much more *liquid* mucus. Half a dozen of them will be found in a cup after a patient has had a long coughing fit, and you will find them floating about and gradually settling to the bottom of this mucus. They are really quite indicative of this fact, viz., that they come from a pouch either somewhere in the lungs, or in a dilated bronchus. Hence, Niemeyer is right in the idea, that they imply the existence of a cavity, though that may not be in all cases a true vomica produced by ulceration of the lung substance. Still, in the majority of instances, such sputa come from phthisical cavities, and they are apt to be different from sputa generally, in having a decided odor. Pulmonary cavities are very prone to induce putrefaction in their contents. The mucus accumulates in them up to a certain point, remains, perhaps, for hours in contact with the air, and decomposition takes place. Indeed, one of the main features of phthisis is this accumulation of pus and the effect of its decomposition upon the system. Here, therefore, let me say that if pus were secreted in any other part of the body and a wall were not thrown immediately around it, that case would be just as dangerous as consumption itself. We may have pus form anywhere; but, fortunately, all other parts, except bone and lung tissue, are capable of making at once a wall of an exudative material, which limits the pus and keeps it from decomposing, or at least from infecting the system. I hold with Mr. Hutchison that pus is contagious,

and can be made so by engrafting anywhere; it is a cell which has just enough vitality to reproduce itself, but cannot make tissue, and the system protects itself against its influence by throwing out a limiting membrane. Now, in phthisis, where ulceration takes place in the lung, the constant movements incident to respiration break up any limiting wall that is being formed. I do not know how else to account for the fact that some persons have a discharge from an abscess for a long time, without the system being infected, except that this abscess is surrounded by a tough, thick layer of exudative material, which constitutes a wall that protects the system from infection by the contents of the abscess. Now, unfortunately, such a wall cannot be formed around a cavity in the lung. Its surfaces have to be raw, ready to absorb, because it is constantly moving twenty or even thirty times a minute in some cases. Therefore, you have a surface that is just as absorbent as if you had raised a blister upon the surface of the skin and removed the cuticle and sprinkled morphine upon it, once the common practice before the hypodermic method came into vogue, and so the unprotected walls of vomicae equally take up the decomposing matter and poison the system with it.

Before leaving this subject of cough and expectoration, there is a fact which should be borne in mind, but the reason for which we do not fully understand, namely, that the cough may entirely cease when some other drain upon the system occurs, as a diarrhoea, constant discharge from the bowels, or from some abscess, or an unusual secretion of urine. I have seen many illustrations of either of these ways in which the cough may be entirely stopped, and consequently the condition of the lungs overlooked. For instance: A certain patient had the cough of phthisis, and a very large cavity in the right lung, almost as

large a cavity as I had ever seen. He afterwards began to suffer from terrible pains in the legs, resembling sciatica, but it proved to be due to the formation of a psoas abscess from disease in the lumbar vertebrae. A great discharge of pus occurred, which lasted for about two years. During the discharge of this pus he had no cough at all, morning, noon or night; it had entirely disappeared, and so much so that I used to listen repeatedly over that cavity, and the air would come in and go out as if it were in a perfectly dry bottle. But, finally, this pus from the psoas abscess began to decrease in quantity, and continued to decrease until we congratulated ourselves that he was going to get well; but back came his cough, and when it came back it set up a condition that carried him off in a few weeks.

Another case occurred in Roosevelt Hospital, being that of a woman who had an abscess about the ileo-cæcal valve, which discharged sometimes externally and sometimes by way of the bowel. This continued for a long time before the lungs were examined. One day I examined her lungs and found a cavity surrounded by extensive consolidation, and yet she never coughed at all. I directed the attention of the house staff to the case, and requested them to take notice whether she coughed any, and she did not until a later period in life, when the discharge entirely ceased; then she coughed, and coughed constantly, and expectorated a great deal.

A still more remarkable case occurred in Roosevelt Hospital. When I went on duty, my attention was called to a man who had diabetes insipidus. He was passing from 77 to 140 ounces of urine daily. It contained no sugar at all; the specific gravity was very low, it was said to be only 1,000, which is the specific gravity of distilled water, but I think the urinometer could not have re-

corded it just right. He had been in the hospital many months with this disease, and, as nothing special was being done, I told them to try the use of opium and valerian, which they did, and the quantity of urine came down even to 47 ounces a day. But when the man stopped passing such large quantities of water he commenced to cough, and on examining his lungs I found a large cavity, which, of course, told us at once that he had phthisis. The treatment for diabetes was stopped, as we would rather see him pass large quantities of urine than cough as he was doing, but without success; he continued to cough, and in a few weeks died of phthisis. It may have been a mere coincidence, but the man had been under treatment a long time and no one had suspected phthisis. He had never coughed, had no indications of fever or anything of the kind, and yet there was found a vomica in the lung.

Some rare cases of absence of cough in phthisis also occur when this disease sets in as a sequel or concomitant of some other disease. For instance, in typhoid fever, the patient often gets almost well, but not quite well, of the fever. A slight fever persists for weeks and weeks. The patient ought to be well but is not. Now, if you cannot discover any condition of the intestine that would account for this delay in convalescence by all means examine the lungs, for you may find extensive consolidation of the lung there, and yet the patient not have coughed enough to attract notice, and will not cough probably until he begins to have rapid disorganization of the lung. I have seen several cases of that sort.

One word in regard to diarrhœa, as connected with phthisis. A diarrhœa without fever is not a suspicious diarrhœa; you need not be much alarmed about it. There are a great many cases of chronic diarrhœa, but

so long as they remain without fever you need not be afraid of consumption of the bowel. But a diarrhœa with a fever, no matter if it is slight, if the fever be persistent, has an unpleasant significance; for, on examining the lungs, you will be likely to find phthisis, and so long as the diarrhœa persists the disease may go on in the lungs pretty steadily, and yet you will not have much to awaken your suspicions about it.

Now, a great deal is indicated by the *sound* of a cough, and I would ask you to study it. There are many different kinds of cough. An expectorating cough differs from a non-expectorating cough, and very little practice will enable you to judge whether a cough is causing something to be brought up from the bronchial tubes, or whether it is simply caused by some irritation, say of epiglottis. An expectorating cough gives you an idea from the very commencement, that there is something to be brought up, that it is going to end with the expectoration of something, and that it will not stop until that expectoration of something occurs. Take a case of old chronic bronchitis with very viscid expectoration. As soon as the patient starts to cough you know he means business, as used to be the case with a devout worshipper at a church where I attended. When he began to cough it would set me in a fidget, for I was almost certain he would turn himself inside out before he got through. It was about as bad as the patting of the footsteps of a long procession of students as they go down a flight of steps. He would keep on coughing and coughing and coughing until you could just hear the thing dying away in a strangled kind of prolonged, distressing and difficult series of respiratory efforts, and he would finally wind up with a few hallelujahs at the end.

A laryngeal element in a cough that has expectoration is not of much importance in the adult, but in the child it is. A cough with a laryngeal element has a sharp whistle connected with it, and when you hear that whistle enter into an expectorating cough in a child you may be pretty certain that you have something which should be watched very carefully.

In a non-expectorating cough, there is a little short hack, as in phthisis, and that is not because there is anything to be brought up, but it means an irritation of the pleura. In order to tell whether there is a localized pleurisy, as generally happens at the beginning of phthisis, have the patient bare his chest suddenly and it will bring on half a dozen of these short, sharp hacking coughs, because of the irritability of the surface, indicating that there is a pleurisy underneath; or you can make him cough by laying the cold hand on the upper ribs on either side, but particularly upon the diseased side; or, if you suspect a person has phthisis, you can bring on half a dozen little, short coughs by quick applications of a cold wet sponge on the chest under the clavicle.

Then we have a great number of reflex coughs—coughs that are caused by irritation elsewhere—of which the commonest is a uterine cough. This is characteristic, being excessively loud like a bark, and very dry, and, like all pure barks, it means nothing at all; there is no bite back of it. Once, while in consultation with a physician in my consulting-room, I heard a constant coughing going on in the waiting-room, and I said to this physician that I had not seen her, but I knew it was a *she*, and, besides that, I knew her cough was uterine. She came in pretty soon with her husband. They had a long face and a story that she had consumption, and they brought a letter from two physicians in the country saying they regarded the case as one of advanced phthisis, but that

it was of very long standing, namely, eight years. That fact made me wonder they took it for phthisis. She suffered much; her cough was very violent, and while trying to describe it, it came on, and was so severe that she nearly strangled with it. She got blue in the face, and had a great time of it. At the close there was a little clearing out of the mouth; there was no true expectoration. Well, to make a long story short, I found, on examination, a large uterine polypus, about the size of a hen's egg, protruding from the mouth of the uterus. When that was removed, the cough stopped. That is only one case of many such. Sometimes the cough is due to something wrong with the uterus, so sometimes with the ovaries.

Now we come to the question of hæmoptysis. This patient has the phthisical neck and other signs of phthisis. He has had a cough for six years. I judge he has fibrous phthisis. His cough at first was worse in the winter than in warm weather, and, according to his story, he began with a chronic bronchitis, which resulted in fibrous phthisis. Patients with fibrous phthisis do not have at the beginning of the disease hæmoptysis. When they do have hæmoptysis it is toward the close of life.

Here is a patient who shows the signs of phthisis much better than the other. How long have you had a cough? "Only a year." Did it commence suddenly or gradually? "Gradually." Have you raised blood? "Yes, sir." When? "Three months ago." Did you ever raise blood before that? "Yes, two months after my cough began." Did you ever raise blood before you began to cough? "No, sir, not that I know of." Did you have much pain before you raised blood? "I had pain in my shoulder."

Now, as I told you last week, that pain is significant. The pain in phthisis is due to pleurisy, and a good many patients do not have pain at all until

they begin to have distress of breathing, and that is a fact to bear in mind, because pain means that you have pleurisy. Now, what is the commonest cause of hæmoptysis? The commonest cause by far is pleuritic adhesions. These are first formed in the great majority of cases of hæmoptysis. They prevent the lung from moving properly with inspiration and expiration, certain lobules are drawn upon by their attachments, congestion of the air vesicles and of the bronchi, as well takes place, and as a result, we have hæmoptysis. Hence, when a person has an attack of pleurisy, you should tell him that some day he may have a spitting of blood, and if so he need not be scared. I say to a good many patients, after they have had pleurisy, that that pleurisy will dispose them to spit blood, for many patients on first spitting blood are very much alarmed at it, thinking something serious is the matter. The shock may be so great that they may not recover from it. My colleague, Dr. Loomis, told me that he knew a patient to die of fright, occasioned by the sight of a very moderate quantity of blood which he spat up. The cause of death could be attributed to nothing else, for an examination revealed nothing but some pleuritic adhesions. Now, your patients who have had pleurisy may be saved all this fright and after depression of spirits, by telling them before hand, that they may have a spitting of blood sometime, but that it is not a serious matter.

Here is a case that we should suppose, from the appearance about the clavicle, to be one of fibroid phthisis due to bronchitis, the lower portion of the lung being affected instead of that portion above the middle line, as would be the case in true phthisis. The patient says he does not suffer pain, and has not spit blood, which would also point to fibroid phthisis due to chronic bronchitis.

How long have you had your cough? "I have none at all." When had you one? "Four or five weeks ago. It never amounted to anything." Did you ever have pains about your chest? "I had about five or six weeks ago, lasting about three days." Is that the only pain you ever had there? "No; have had pain under my left shoulder blade." How long did you have that? "About the same time. Both went away at the same time." Did you ever raise blood? "I raised a little blood about four months ago. I had a little bit of a cough for four or five days and then raised some blood. I never raised any before that that I remember of. It was long before I had the pain on this side." This is a case illustrating the true sinking of the clavicles we spoke of last week, with a depression on each side, along with pain.

The next patient's history, gentlemen, is significant. He tells us he has pain and uneasiness about here; on asking him how he was taken, he says he was taken with a pain one morning, and describes it by pointing to a particular spot over the chest; it was pretty severe. He had raised blood sometime before. Now, put these facts together. At present he has no localized pleurisy; he has no localized pain; at present he certainly has no localized pneumonia, because he would gesticulate in this way if he had, but when it commenced it began with pleurisy without doubt; it began with a pleurisy, or a pleurisy and pneumonia, but he must have pleurisy because of the way he points to a particular locality as the seat of the pain. Pneumonia alone does not produce pain. On asking him whether he had raised any blood, he says he had before, but denies having had any pain then. I think he must have had some pain but has forgotten it, but his attacks of pleurisy have returned repeatedly. That is the way

they do in phthisis. Then comes hæmoptysis, with repeated attacks of pleurisy, very slight, so slight that the patients do not probably notice them at the beginning at all; as the disease progresses, however, they have attacks of severe pleurisy. Those are the cases in which you have hæmoptysis sooner or later. Now, pleuritic cases of hæmoptysis are of little importance; you need not be alarmed about them for any immediate danger. Tell the patient there is no immediate danger. The dangerous cases of hæmoptysis are of a different kind. They are those which come on when vomicæ have formed in the lungs too rapidly to allow of obliteration of the blood vessels; some arteries remain obliterated, stretched across these rapidly forming vomicæ, and when one of them breaks it lets out arterial blood, rapidly, and the patients may be suffocated instantly or they may die in an hour or so. That kind of hemorrhage is very different from the other. It comes on all of a sudden; the patients almost suffocate from the quantity of blood that flows out, and they are very soon exsanguinated. When this occurs the only thing that can be done is to lie them flat, and keep them perfectly still. You will have no question from the very serious appearance of the patient, and his collapse, as to what the trouble is; but it is very uncommon. I have had only two such cases, both proving fatal at the second attack. The first attack was very dangerous; the second attack in either instance proved fatal.

These cases, gentlemen, illustrate to you, how far you can proceed toward a correct diagnosis in phthisis without touching the patient in the way of physical exploration. Each of the patients before us presents signs which would enable me to make the diagnosis of phthisis, and to tell which lung was affected, and to about what degree, without resorting to physical

exploration at all; while having observed those signs, and got the history of the patient, we are then enabled to proceed much more intelligently with the physical exploration itself.

ORIGINAL PAPERS.

THE HYPODERMIC INJECTION OF MORPHIA.

BY W. A. B. SELLMAN, M. D.

(Read before the Baltimore Medical Association at the stated meeting held March 14th, 1881.)

It is generally recognized that Dr. Wood, of Edinburgh, was the first to administer medicines hypodermically, as he made use of this method as early as 1843. It was made known after being extensively tested, and the results were published in 1859 by Dr. Charles Hunter, of London, while Behier, Courty and Follier, of France, and Oppolzer, Scanzoni and Graefe, of Germany, are chief among those who, in that and the succeeding year, spread intelligence of its merits. Mr. Rynd, of Dublin, claims that the subcutaneous injection of medicinal substances, to combat neuralgia, was first used by himself in 1844. Dr. Sieveking, of London, attempts to establish, that Dr. Kurzak, of Vienna, was the first to inject medicines under the skin. Dr. Isaac E. Taylor, in an article in the *New York Medical Gazette*, April, 1870, claims that Dr. Washington and himself used this method in 1839. They punctured the skin with a lancet, and employed an Ansel's syringe to throw a solution of the medicine under the skin. In this country, Dr. Rupperer was the first writer upon hypodermic medication (May, 1860). In 1865, Dr. Charles Hunter edited a work, "On the Speedy Relief of Pain and Other Nervous Affections by Means of the Hypodermic Method." In the same year appeared Dr. Albert Eulenberg's book on "The Hypodermic Injection

of Medicines Treated According to Physiological Experiments and Clinical Experience." In the same year, Dr. E. Lorent, of Bremen, published a treatise on his "Clinical Experience with Hypodermic Injections." During this year appeared the first book written on this subject in this country, by Dr. A. Rupper, of Boston, on "Hypodermic Injections in the Treatment of Neuralgia, Rheumatism, Gout and Other Diseases." The most excellent and comprehensive book of Dr. Roberts Bartholow, on "The Treatment of Diseases by the Hypodermic Method," has passed to its third edition. Dr. H. H. Kane has edited a work on "The Hypodermic Injection of Morphia: Its History, Advantages and Dangers," 1880; also "Drugs that Enslave," 1881, which treats of the opium, morphia and hashisch habits.

In regard to the salt of morphia to be used hypodermically, there are various opinions. Dr. Eulenberg prefers the hydro-chlorate; his formula is four grains of the hydro-chlorate of morphia, four drops of hydrochloric acid, one drachm of distilled water. Dr. Wilson (*St. George's Hospital Reports*, Vol. iv) claims that the sulphate should be used without the addition of acid. Dr. Bartholow prefers the sulphate, and it is the salt most frequently employed. Dr. Anstie dissolves the acetate in hot distilled water, with a minimum of acetic acid. Dr. Lawson, in the *Medical Times and Gazette*, Nov., 1870, recommends a solution of the muriate, gr. x, to aqua destil. ʒii. This solution requires heating to give it fluidity at ordinary temperature. The addition of one-forty-eighth of a grain of atropia, to one grain of morphia, is preferred by Dr. Brown-Sequard in obstinate neuralgias. Dr. H. H. Kane ("Drugs that Enslave") advises the use of the following formula for the preparation of solution of morphia, that will keep for a long time unchanged, never

causing abscesses, and when carried in the pocket for months being in as perfect condition for use as when freshly prepared: Take four fluid ounces of boiling distilled water, add two grains of salicylic acid and sixty-four grains of sulphate of morphia; stir with a glass rod until they are dissolved. Filter through coarse filtering paper, while hot, and keep in a glass stoppered bottle, of green glass. Prof. Luton, of Reims, uses cherry laurel water as a menstruum; he claims that it will keep indefinitely.

The dose of morphia, according to Bartholow, "varies from one-twelfth to one-half a grain. *In commencing, it should not exceed one-third of that ordinarily administered internally.*"

I use twelve to twenty minims of Majendie's solution as a single injection.

The immediate effect of the injection is a smarting, sometimes, pain, in the part. At times this amounts to only an itching. There is a sense of heat and of fullness in the head, and where the injection has entered a vein, a giddiness and singing in the ears. In some cases there is nausea. "Loud borborygmi not unfrequently occur at the moment the cerebral symptoms are perceived." Walking becomes difficult; the face is flushed, mouth and tongue dry; the hearing is more acute than normal. After a variable length of time, the pain, for the relief of which the injection was given, disappears, and the patient either goes to sleep or lies in a state of calm repose. Dr. Hunter has remarked the effect of this treatment in lowering the pulse in acute mania. He also observed the diminished rate of respiration. Bartholow, in his work, cited previously, presents a diagram of the pulse, temperature and respiratory movements, and also sphygmographic tracings.

Cutaneous irritation, especially itching of the nose, is developed, and diaphoresis usually follows. Should the injection be administered after a full meal, digestion is suspended

for several hours. Constipation generally results; the kidneys secrete less urine, and there is some difficulty experienced in urination. Bartholow claims that there is a diminished secretion of bile, whereas Dr. Rutherford, in the *British Medical Journal*, February, 1879, "has found by experiment on the dog that morphine sub-cutaneously injected has no effect on the secretion of the bile." Some patients experience headache and nausea as the effects of the medicine pass away. In other cases there is a rambling conversation, and still in others delirium. The effect passes off in about sixteen to twenty hours, although I have seen cases where it lasted for thirty-six hours. M. Calvert (Thèse de Paris, 1877, Etude Experimentale et Clinique sur l'Action de la Morphine) presents: 1. A physiological research of the action of morphine upon the various functions of the organism. 2. A clinical study of morphine as a therapeutical agent, especially in the relations of acute to chronic morphinism. In the first, he observes that both intravenous and subcutaneous injection of the hydrochlorate of morphia accelerate respiratory movements, this acceleration being followed by a period of retardation, and sometimes a momentary arrest or respiratory syncope. The same relative effects occur with the cardiac movements. During this time animal heat exhibits analogous phenomena, namely, the elevated is followed by lower temperature. In fact, the absorption of morphia by subcutaneous injection, produces a very marked influence upon the reflex actions.

In 1879 I injected twenty minims of Magendie's solution into the arm of a lady, about thirty-two years of age, to whom I had given hypodermic injections previously. The patient was accustomed to take half-grain doses of morphia by the mouth, which accounts for my giving this unusual dose. I injected into the arm above

the elbow. In three minutes she appeared to be under the full influence of the drug, perfectly relaxed and speechless. The patient resided in the country, and I did not visit her until the second day after the injection. The attendant reported that she had remained in the comatose or stupefied condition, in which I had left her until a short time before my arrival; that is, the stupefied condition lasted about forty hours. I examined the patient; she was free from pain, but extremely prostrated. I would note the fact that there had existed complete inactivity of the kidneys. The case progressed favorably.

Dr. Lorent reports a case of deep narcotism following the injection of morphia. "The patient was a delicate male forty-three years of age, suffering from delirium tremens; one grain of morphia was administered. The pupils were so contracted as to appear entirely closed. There was perfect insensibility to pricking with a needle. The pulse was very slow and respiration sank even to six in the minute, so that, fearing a fatal termination, artificial respiration was maintained. The threatening symptoms, however, soon subsided, and from the favorable termination of the delirium tremens which soon followed, the large dose seemed to have exerted a good influence."

Dr. E. T. Wilson, in an article in the *British Medical Journal*, May 24th, 1879, complains, that, in a number of cases, his patients have been peculiarly affected. Scarcely has the fluid entered beneath the skin when the most intense feeling of irritation and pricking is felt in the part, spreading from the puncture rapidly all over the body. At the same time the skin becomes suffused with a bright blush. The heart's action then becomes greatly quickened, and there is a throbbing, rushing feeling through the head. The hands were somewhat swollen and the lips had a glazed ap-

pearance. In one case the patient became rapidly unconscious as if knocked down by some sudden shock. The symptoms subsided gradually, leaving behind great pain in the head.

In a communication to the *British Medical Journal*, March 2d, 1872, Dr. Hausmann expresses himself as having observed—as Nussbaum and Mühe had previously done—that the subcutaneous injection of morphia is sometimes followed by pain and redness of the face, contractions of the muscles of the lower jaw, a hammering, frequent pulse (130), dyspnoea and clonic spasms of the limbs. These symptoms lasted five minutes. The spasms first ceased. Then the pulse became quiet, and at last violent sweating broke out. Hausmann is disposed to accept the explanation given by Nussbaum, that in such cases the morphia directly enters the veins. The production of the phenomena did not appear to depend on the quantity of morphia injected.

Dr. H. Harrington (*Chicago Medical Journal*, April, 1879) "was called a short time since to treat W. S., male, aged 62, for acute dyspepsia (bilious attack), accompanied by very severe pain. Administered hypodermically, in hypogastric region, sulphate of morphia 0.02 grains. Before the syringe was emptied, alarming syncope supervened, and recurred twice at intervals of ten or fifteen minutes; stimulants administered freely, artificial respiration and the use of electricity, were successful in reviving the patient. Neither narcotism nor coma were in any degree present."

Dr. E. F. Ingalls (*Chicago Medical Journal and Examiner*, May, 1878) says "I know of no precaution which will render the hypodermic injection of sedative doses of morphia entirely safe; the medicine may be given in this way a thousand times without harm; but the next time it may produce death. The danger appears to arise from rapid absorption or

injection directly into the circulation, and it is greatly enhanced by the impossibility of removing the poison."

Dr. H. Gibbons (*Pacific Medical and Surgical Journal*, June, 1878,) complains of the peculiar effects in a large number of cases.

Dr. H. H. Kane reports a large number of cases where the injection was followed by peculiar and very frequently alarming results. He advises the use of a ligature or small tourniquet, to be placed around the arm above the point of intended puncture; should any symptom of syncope come on after the injection, he tightens the ligature and the patient is immediately relieved, for the medicine cannot pass into the system.

Dr. E. F. Ingalls addressed circulars of inquiry to eighty physicians of the Northwest, and thereby brought to light seven fatal cases not heretofore reported. In two of these, the amount given was believed to be only that habitually used by the profession, but was not positively ascertained. In one case one-fifth of a grain, with one seventy fifth of a grain of atropia; in another, one-quarter of a grain, given for sciatica, proved fatal. One death was from two doses of one-third of a grain each, with an interval of four hours between the first and second doses. Another death was caused by two doses of one-quarter of a grain each. In another case, where the patient was suffering from neuralgia of the muscles of the back, one-sixteenth grain of sulphate of atropia was injected; no relief being given, one-quarter grain of morphia was administered by the mouth. In three-quarters of an hour from that time, one-quarter grain of morphia was injected hypodermically, which soon quieted the patient. The doctor left, and the patient died within a few hours.

The *Lancet*, Nov. 8th, 1879, reports a case where the patient (a lady) used the enormous quantity of twelve

grains for a single injection, using, during a violent attack of facial neuralgia, twenty grains during twenty-four hours. The last injection produced tetanus, caused by the irritation of the puncture of the needle, and death ensued.

Dr. Z. P. Sleigholine (*Practitioner*, July, 1871,) gives the results of his experience with this mode of medication, "derived from two thousand injections of morphia, while house-physician to the Manchester Royal Infirmary." He reports that with one exception, he never saw any immediate ill effects from it, and only in one case, any great evil result from its prolonged use.

Many physicians hesitate to employ the hypodermic syringe for fear that it may produce a craving for anodynes. The *Lancet*, October 11, 1879, contains an article on hypodermic "dram drinking," and regrets that the hypodermic syringe has been allowed to pass into other than professional hands, and considers that a physician should be held responsible when he instructs a patient to use the instrument. It is an indisputable fact that there are a considerable number of persons who are slaves to the habit of constantly employing hypodermic injections upon themselves, but the physician does not run the same risk of producing the morphia habit when he uses the syringe as he does when he administers the drug by the mouth. The patient can secure his morphine from the druggist, and he generally finds out what quantity to take as the dose is popularly known. But he has great difficulty in buying a hypodermic syringe, and he does not know what salt or quantity to inject. I claim also that the habit, when established, is very much more easily broken off than when the agent is taken by the month. I recall a case (a lady) in whom I commenced the use of the hypodermic injection of

morphia, in May, 1874. For three months I injected every second day, for the succeeding nine months daily, during the next two months twice a day, after that daily until November, 1878. At that time I determined to cease using the agent. I did so suddenly, refusing to taper off, and not giving any anodynes by the month. The patient was much prostrated, but progressed favorably, and has not had a hypodermic injection since. There was no opiate of any kind allowed for several months. Since that period, I understand that morphia has been administered by the mouth for the relief of pain.

Dr. J. Braithwaite (*Lancet*, November 17th, 1877) reports a case of discontinuance of morphia after its use hypodermically for seven years. The patient, a lady, injected it herself, sometimes to the amount of fourteen grains daily. She suddenly determined to give it up entirely. "Violent vomiting and purging were the result, but she persevered, and is now well."

There exists a difference of opinion in regard to the point of puncture. I have always secured the full effect of the drug when inserted at a point distant from the seat of pain, generally selecting the left arm above the elbow.

M. Charppe, who has performed many subcutaneous injections with the hydro-chlorate of morphine, asserts that they act more promptly, the nearer they are made to the seat of pain.

Dr. Lorent advises localization of the injection. Dr. Eulenberg states, that, in a case of double rheumatic sciatica observed by him, complete relief of pain for a space of from two to three days followed each injection, upon the side upon which the injection was made, while upon the other side the pain immediately returned upon the subsidence of the effect of the narcotic upon the nervous centres. His conclusions are: "After the sub-

cutaneous administration the sensibility of the region injected is considerably diminished, while the corresponding symmetrical region of the other side of the body shows no change or a relatively much lesser degree of diminution. If an injection be made at a point where a sensitive (or mixed) nerve runs superficially under the skin, sensibility is diminished, not only at the place of injection, but also over the whole surface to which the nerve is distributed, nevertheless, in the greatest degree at the point of injection."

Phlegmonous abscesses not unfrequently form at the point of puncture. It is unaccountable why they should form in some cases only. During the past year I have had a large number of abscesses to form after injection. I generally make my own solution, and last June purchased one drachm of morphia, labeled with the name of a celebrated manufacturing chemist. All the cases, in which I used this preparation, have had terrible abscesses; they were some fifteen in number. As soon as I discovered this effect of the injection I secured another bottle of morphine, but of a different manufacturer. I used the same syringe and needles, and have not had an abscess since. I took the remaining morphia to a chemist for analysis. Unfortunately there was not sufficient remaining to produce positive proof of impurities in the drug. I would state that there did not appear to be any general poisoning of the system, but merely local irritation. Cauterization with the solid nitrate of silver at intervals appeared to be the most successful treatment.

Dr. George E. Jones (*Cincinnati Lancet and Clinic*, 1878) says:

"Injections under the skin are, as a general rule, painful, and are liable to produce abscesses.

"Deep injections are not painful, and are not so liable to produce abscesses,

"The injection fluid must be at least of the same temperature as the body."

Dr. E. Peyreigne (*Revue Med. de Toulouse*, xii, 309-320) reports phlegmonous abscesses following hypodermic injection of morphia chlorohydrate.

Dr. H. H. Kane, considers that these abscesses are due, in the majority of instances to (a) carelessness in injecting (b) unclean needles, (c) a dirty or over-acid solution, or (d) a low condition of the general system, predisposing to inflammation and suppuration on slight irritation.

The question arises, in what diseases is the hypodermic injection of morphia indicated? By the introduction of narcotics into the cellular membrane of the body we have a mode of attacking and subduing cerebral excitability more rapid and more certain in action than the stomachic method. In a great number of diseases there can be no certainty about the stomachic dose. "In delirium tremens, for instance, the pill, the draught or powder, may lie in the stomach undigested; it may be vomited; it may be absorbed partly or entirely, and if the latter, so slowly as to do no good. In the meantime the life of the patient is at stake, and death from exhaustion may occur before that sleep, which would save the patient, can be procured. With the hypodermic syringe sleep can be secured or delirium quieted in a few minutes. The certainty of effect should follow, for the whole amount injected must be all absorbed and circulated. In the mentally overtaxed or the melancholic patient, the night administration will not cause sleep at all times; it sometimes rather arouses the brain; it may even keep the patient awake, in 'a calm state of dozing,' which has the equivalent effect of good sleep the next day. The patient will arise refreshed, mentally stronger and fit for his day's work."

Dr. Hunter asserts. that, "for derangements of the cerebral nervous system, we have, in the hypodermic method, a means of treatment, far exceeding, in its immediate efficacy, any other mode of medication."

Dr. C. Lockart Robertson (*Practitioner, May, 1869.*) writes, that "the value of this treatment of mental disease is still much unappreciated, despite its satisfactory working. Prolonged wakefulness, maniacal excitement, obstinate and persistent refusal of food, or drink, or medicine, and destructive, suicidal tendencies, are indications for the employment of this treatment."

Dr. Bartholow speaks of the benefit being more conspicuous in the early stages of mania, and considers that to be the case, especially, in puerperal mania.

Dr. Anstie (*Reynolds' System of Medicine*, vol. ii, p. 90,) advises the hypodermic method to be employed in delirium tremens, in preference to giving the opium by the mouth.

Dr. Maudsly (*Reynolds' System of Medicine*, vol. ii, p. 60,) recommends this treatment in insanity. He adds the caution that at times it will not quench the fury of acute mania, and that successive injections, followed by brief snatches of fitful sleep, have been succeeded by fatal collapse.

Dr. O. J. Wolff (*Archiv. fur Psychiatrie und Nervenkrankheiten, Band ii*) considers the state of the arterial tension to be the guide to the use of morphia. "If there be a low state of the arterial tension, with slow pulse, small doses are indicated. When the pulse is quick, and tension high, large doses may be given. Caution should be used in administering large doses to the obese and the aged. It may be used in both curable and incurable cases."

Kraft-Ebing (*Bulletin of General Therapeutics*, 1870,) has used morphia subcutaneously in lypemania, with excellent results; also in the treatment

of "moral hypochondriasis, and all forms of neuralgias."

Radcliff (*Reynolds' System of Medicine*, vol. ii,) treats cerebro-spinal meningitis with the hypodermic syringe. Bois and Niemeyer have had favorable results from this treatment. Dr. A. Arnold coincides with the above.

Bartholow speaks of having witnessed wonderful cures from this treatment, especially in the stage of irritation, and considers it to be useless when paresis occurs.

Dr. Hutchinson (*Pennsylvania Hospital Reports*, vol. ii,) has secured almost instant relief by the injection of one-quarter grain of the sulphate of morphia in cases of sunstroke, rapid recovery following.

In all forms of convulsions the hypodermic method is indicated. I use it even in infants, and consider that I have saved life where different treatment would have failed.

In all varieties of hysteria this is a dangerous remedy to make use of, on account of its producing a craving for this form of stimulation. I doubt whether there is a single member present, who has not regretted administering the first hypodermic to a hysterical patient. The infatuation amounts to something terrible, and the physician is called upon at most unreasonable hours to administer the injection.

Brown-Sequard treats epilepsy most successfully by a combination of morphia and atropia.

Bartholow considers that "the hypodermic injection of morphia is preferable in those cases, where the paroxysms occur at night, and in convulsive tic. He does not consider it proper, as a general rule, in cases dependent upon cerebral lesion. When the paroxysms succeed each other rapidly and are violent, the injection may be made during an attack.

Scanzoni, Lander, Lehmann and Hermann, use this method successfully in eclampsia.

Prof. Loomis gives one-half grain doses in the convulsions of albuminuria, repeating the dose if required, having given as much as two grains within a few hours.

Hunter and Levick, of Philadelphia, have found this treatment successful in chorea. Bartholow limits it to very violent cases of chorea. The hypodermic syringe has been experimented with in the relief of tetanus and hydrophobia; it has given sleep and diminished spasm, but without permanent effect or arrest of the disease.

Eulenberg has relieved the muscle-spasm succeeding amputation of the thigh.

Bartholow considers this treatment very successful in the relief of the painful jerkings of the muscles which occur in cases of fracture.

J. Russell Reynolds reports relief of "writer's cramp" for a certain period, but no permanent cures.

Wm. Roberts (*Reynolds' System of Medicine*, vol. i) has had the most successful results in relieving the pain associated with "wasting palsy."

In the treatment of neuralgia, the hypodermic method cannot be superseded by any other. The most brilliant results have been achieved by this means.

Dr. F. E. Austie (*Reynolds' System of Medicine*, vol. i) considers that the invention of the subcutaneous injection has thrown a new light on the capabilities of opium as an anti-neuralgic. "It may be confidently said that, in the right use of this remedy, we possess the means of permanently and rapidly curing very many cases, and of alleviating the most inveterate forms of neuralgia."

Bartholow has a very elaborate article on this affection treated hypodermically, to which I refer you.

In a number of the affections of the respiratory system, the hypodermic method is very efficacious.

The paroxysms attending asthma

are quickly relieved. Vulpian, Hirtz, See and Bartholow, commend this treatment.

Dr. J. Keith Anderson (*Practitioner*, Nov., 1875,) gives one-sixth grain of the hydro-chlorate of morphia with great success.

Dr. Leslie West adds his testimony as to the value of this treatment in asthma.

Pletzer, Waldenburg, Lorent, Kirkes and Jarotzky, testify to the relief of the dyspnoea of emphysema.

Pleurisy and pleurodynia are much benefited, and the pain relieved.

Bamberger, Bartholow, Eulenberg, Erlenmeyer and Lorent, consider this method indicated in the cardiac neuroses.

Dr. C. H. Fagge (*Reynolds' System of Medicine*, vol. ii) has often relieved the paroxysms arising from disease of the valves of the heart, by subcutaneous injections of morphia.

R. Douglas Powell considers this to be the best remedy to relieve pain in aneurism of the aorta.

Dr. Wm. Murray adds his testimony as to the efficiency of this treatment.

Allbutt and Bartholow advocate hypodermic injection of morphia in nervous dyspepsia with intolerance of food; also for relief of gastralgia and gastric ulcer.

Dr. Patterson presents wonderful results in the treatment of cholera. Of forty-two cases treated by morphia subcutaneously, twenty-two recovered, and twenty died. Of ten cases "treated in the usual manner," nine died and one recovered.

Bartholow considers morphia injections "the most serviceable remedy for the first symptoms in cholera, but when cramps occur, and collapse is imminent, morphia must be supplemented by chloral."

The vomiting of pregnancy may be controlled in most cases by a small morning injection of morphia

Dr. Thos. Johnston (*Medical Times*

and Gazette, April, 1869) strongly recommends this injection of morphia over the region of the stomach as a remedy in sea-sickness.

In all forms of colic, I employ the hypodermic syringe in preference to other treatment, on account of the quick relief it secures.

I have derived the greatest benefit in all forms of peritonitis by the early use of the hypodermic syringe.

In cystitis, both acute and chronic, this treatment relieves the expulsive efforts and diminishes the irritability of the mucous membrane. In calculus, the suffering of the patient is much relieved.

Dr. Z. C. McElroy (*St. Louis Medical and Surgical Journal*) has used these injections in epididymitis with the best results. He injects one-half grain under the skin of the scrotum. Constitutional treatment is instituted at the same time. No cases have been treated by him save those of urethral origin.

Dysmenorrhœa and the pain resulting from uterine applications and operations are relieved by the hypodermic injections.

Dr. L. F. Babcock (*New York Medical Journal*, Sept., 1870) relates a case where he prevented abortion at the fifth month by morphia, used hypodermically; also cures of acute rheumatism.

Dr. Korman (*Medical Times and Gazette*, Oct., 1868) uses the hypodermic in labor: 1. During painful dilatation and expulsive period, especially in primiparæ and in narrow pelvis; 2. Spasmodic pains; 3. In painful complications of the process of labor in general; 4. In severe after-pains.

Dr. Melvin Rhorer (*Medical Press and Circular*, 1871) has found the hypodermic injection of great benefit in labor, when turning is required.

Dr. F. D. Lente (*New York Medical Journal*, April, 1870) has relieved the headache accompanying chills, by

the subcutaneous injection of morphia.

Prof. Estlander claims great success in the treatment of traumatic erysipelas.

Dr. Thierfelder, of Meissen, strongly recommends this injection instead of chloroform inhalation, as a preparation to reducing dislocations.

Dr. Baroth has, by its assistance, been able to reduce hernia by taxis, after the usual remedies and manipulations had failed.

In conclusion, you will have observed that I have not relied altogether on my individual experience, but I have availed myself of the light that has been thrown upon this subject by the careful study and experience of many eminent and trustworthy members of the profession. On this account, I have made this paper much longer than I had intended, but the subject is of such importance that I do not feel justified in curtailing or dropping the reported wonderful cures in diseases where the hypodermic has previously been seldom employed.

The conclusions that I draw after a careful analysis of the experience of the profession, are: (1) that the hypodermic method is invaluable in cases where speedy relief from pain is desired, or where nervous excitement or mania requires to be quieted; (2) that the utmost care and precaution will not prevent the peculiar sensations sometimes experienced by our patients, which effects are seldom more than transitory; (3) in regard to abscesses, they will seldom result, unless there exists some impurity in the drug, or uncleanness of the instrument. In the cases that I reported, I feel confident that there was an excess of acid present in the solution of morphia; (4) that there are a few persons who cannot take morphine in any form, and that the use of the subcutaneous method is contra-indicated in these cases.

SANITARY TRACTS, COMPILED
FROM MEMORANDA ON PRE-
CAUTIONS AGAINST CON-
TAGIOUS AND INFEC-
TIOUS DISEASES.

BY C. W. CHANCELLOR, M. D.

Secretary of the Maryland State Board of Health.

NO. III.

ON BATHING.

Connected with the means of improving the health and preventing disease is the frequent and systematic use of "soap and water." Among the ancients bathing was as common, especially among the higher and middle ranks, as eating or sleeping; but, in this, the nineteenth century of the Christian era, it is too often neglected, or only considered as a part of physic. Whether we view this subject as connected with health or as subservient to the purposes of domestic comfort, it is of the greatest importance. Lord Bacon has justly observed (Bacon's Works, vol. iii., p. 150), that bathing may be so used as to become a great help to health and to the prolongation of life.

In all ages of the world frequent ablutions of the surface of the body have been considered important auxiliaries to the maintenance of a high degree of health and to the physical culture of the people. Indeed, "cleanliness is next to godliness, and necessary to it." In Egypt, the birthplace of arts and sciences, bathing was deemed an important factor in the economy of hygiene, and the Greeks and Romans considered it so indispensable an element of health that places of gorgeous proportions were provided, where all grades of the people—the poet, the sage, the philosopher, the merchant, the mechanic and the laboring man—met to enjoy the luxury of the bath, or to engage in athletic sports as their fancy dictated. Nothing in this age of vaunted luxury and refinement can equal the beauty and splendor of those ancient marble palaces erected as a shrine for the worship of Hygeia. According to Fabricius there were eight hundred and fifty-six public baths at Rome, and some of them were large enough to contain at one time eighteen hundred persons. In addition to other

baths the Romans had the "Calida Natatio," or tepid swimming baths, which were considered powerful promoters of health, being very beneficial to the young and of especial advantage to the old.

Bathing is not to be considered merely as an idle and luxurious amusement, but as a practice so favorable to health and morality that it ought not only to be encouraged as much as possible, but it should be made part of the general policy of the country. Considering the question in a hygienic point of view, we must admit its importance in keeping the skin, with its millions of pores and its twenty-eight miles of sewerage pipes—sweat ducts—in a clean and free state, smooth, elastic, soft and active; in short, capable of fulfilling its natural functions.

Hufeland, a distinguished sanitarian, has forcibly shown the great advantage of the bath for warding off diseases, by promoting an equal circulation through all parts of the body. For the same reason he considers it as a most valuable auxiliary in the treatment of disease. Following out this principle, he declares—and with perfect truth—that "if due attention be paid to the health of the skin by the use of the bath, and strict attention to cleanliness and change of dress, medicine of any kind will be much less necessary than it is now conceived to be, and the digestive organs will be found to execute their natural functions with much more comfort and satisfaction than when required to digest irritating drugs and food."

But the practice of bathing is not only to be advocated on the plea of cleanliness; it has a direct sedative influence on the nervous system, and leaves a feeling of comfort and repose not wholly to be attributed to the consciousness of being clean. From the practice of bathing in the summer season, the muscles gain strength, the appetite increases, health improves, and the intellect participates in the general improvement. There is no better means of giving strength to scrofulous children, to chlorotic girls, and to men debilitated by labor or study.

BATHING AT DIFFERENT STAGES OF LIFE.

1. *Childhood*.—The advantages of bathing, to children, are generally ad-

mitted. It is a disputed point, however, whether the cold or the tepid bath ought to be preferred. The celebrated Galen was of opinion that a cold bath retarded the growth of the body, and he advised against its application until the age of puberty. Even then he conceived that it should be commenced with the greatest precautions.

Others maintain that though it may be proper to begin with a moderately tepid bath, yet infants may soon be inured to cold bathing, which, even if it check the growth, it strengthens the soft fibres and confirms the stamina. Under no circumstances, however, should it be carried too far, and only be continued whilst the child is evidently the better for it. Perhaps alternate hot and cold bathing, according to the doctrine of Celsus, would be the most expedient. It is at least very certain that, by the proper use of the warm bath, many infantine diseases may be prevented, bathing rendered easy, rickets cured, and the whole physical condition of the child considerably improved. The occasional use of the warm bath will also be found highly conducive to maintaining the skin in that state of softness which is not only a sign of health, but which, in those cutaneous diseases to which infancy is liable, tends to facilitate the eruption, and consequently to diminish the danger.

2. *Middle Age*.—In manhood, cold bathing may be resorted to with resolution and perseverance; and those who practice it in the proper season, or who bathe the whole body every morning, will find ample reason to continue the practice. The frequent use of the bath, and perhaps alternate hot and cold bathing, will be found the most effectual means of clearing off impurities from the skin. Indeed, it may be regarded as a species of universal domestic remedy, intimately connected with cleanliness, and in a great variety of cases, one of the surest means by which health and vigor can be sustained.

3. *The Aged*.—Cold bathing is not to be recommended to the old, or even to the middle aged, unless they have been accustomed to it early in life, and have persevered in it. The enduring of cold is a matter of habit, and cold bathing, therefore, cannot be attempted with

impunity by persons advanced in life, if unaccustomed to it. The use of the warm bath, however, is different; for warmth combined with moisture will support the feeble, and give health to the shattered constitution. Indeed, at the approach of old age, the secretions are less copious, and various other functions begin to fail. The diminution of the cutaneous secretions, in particular, gives rise to that harsh feel of the skin so common in old age. In such cases, the habitual use of the warm bath may be considered as one of the most grateful and salutary enjoyments of declining strength. We may say of bathing, with a celebrated poet—

"This is the purest exercise of health,
The kind refresher of the summer heats:
Nor when cold winter keens the bright'ning
flood,
Would I, weak-shivering, linger on the brink.
Thus life redoubles."

SOCIETY REPORTS.

CLINICAL SOCIETY OF MARYLAND. SESSION 1880-81.

T. S. LATIMER, M. D., President, in the Chair.

ABSCESS OF LIVER.—Specimens exhibited by *Dr. R. Winslow*, with the following history:

October last, he was called to see a man suffering from vague abdominal symptoms. For a year he had had dyspepsia, but was not thereby incapacitated for work. His symptoms became aggravated at the time mentioned, he had severe pain in the epigastrium extending down to the umbilicus, with considerable nausea, almost complete loss of appetite, and emaciation. There was also a constant gnawing pain at the umbilicus, suggesting the idea of cancer. Previous to his sickness he was quite fat. Under ingluvin and tonics he improved, appetite returned, vomiting ceased, and he was able to be again down stairs. But the improvement was of short duration, and in a few weeks nausea and painful retching of bile-stained mucus, with constant but varying pain in the right hypochondrium were present, and these symptoms persisted until death. At one time there was also pain in the right shoulder. Anorexia was complete.

There was slight hardness in the epigastrium, noticed about three weeks before death, but the resonance at this point was tympanitic. The liver did not extend below the ribs. The patient was intensely jaundiced at time of death and the urine was tinged with bile. The epigastric hardness was smooth, firm and resistant. Afterwards fluctuation became manifest, and at the same time there were profuse sweats with rigors. The temperature was never exalted. He had never had dysentery or diarrhoea; on the contrary the bowels were rather constipated.

Post-mortem. Convex surface of liver everywhere adhered to diaphragm. In left lobe there was an abscess, containing about one-half gallon of pus. The abscess, which extended slightly into the right lobe, burst in removing the liver from the body. Two smaller abscesses were found in the right lobe.

The patient was a German, 60 years old, always temperate and healthy, and had lived in one locality for 30 years. There was no obstruction of the bile ducts to be found, nor any other cause for the hepatic disease. Aspiration had been repeatedly urged in this case, but was obstinately declined.

Dr. J. Shelton Hill related a case which he was first called to see three years ago. At first he supposed him to be suffering from malignant disease of the liver, as Prof. N. R. Smith had removed the right testicle for supposed cancer. Afterwards diagnosing an abscess of the liver, 60 ounces of pus were aspirated at various times, but the cavity filled so often that it was freely opened with a bistoury, after which it healed permanently. The patient recovered, and is now well. This patient has lived for over 30 years in Baltimore.

Dr. Coskery alluded briefly to three cases:

1. Was a young man, who had been west but not south of Maryland. There was a large abscess of the right lobe, from which pus was removed and discharged to the extent of about five gallons in all.

2. Resulted from necrosis of the ribs.

3. Was a case in which there were multiple abscesses in the liver.

The case of *Dr. Winslow*, he would

suppose probably pyæmic, because of the multiple abscesses found, and because there was no examination of the lungs or skull.

Dr. Winslow was certain there was no necrosis of the ribs or skull, nor disease of lungs, physical signs, cough, &c., being entirely absent.

CANCER OF PANCREAS, PRESSING ON COMMON BILE DUCT AND PRODUCING FATAL JAUNDICE.—*Dr. J. Shelton Hill* exhibited the specimens, which were obtained from a man aged 50, who was remarkably robust until about two years ago. He began to lose flesh about six months ago and shortly afterwards became intensely jaundiced. The jaundice continued until his death a few days ago. The diagnosis of the case offered much interest. Several physicians saw him, nearly all of whom were unanimous as to the existence of obstruction to the common duct, but there was a difference of opinion as to the nature of the obstruction. As he had had no pain, the presence of impacting gall stones was excluded by all.

Autopsy: Liver enlarged; the gall-bladder contained more than one pint of bile; numerous hard cancerous deposits were scattered through the liver and kidneys. The cause of obstruction was due to malignant disease of the pancreas, the head of which completely obstructed the pancreatic and common bile ducts. The growth was undoubtedly a scirrhus.

Dr. Pole had this case under care last August for jaundice, supposed to be catarrhal. Various remedies were used without effect. The patient had symptoms of cholæmia four or five weeks before death.

Dr. Tiffany had seen the case once in consultation with *Dr. Pole*. The patient had cholæmia—slow pulse, stupor, etc. The liver was not then enlarged, and the gall-bladder was not perceptible. There was nothing in the case to indicate more than a catarrhal trouble.

Dr. Arnold said it would be impossible in such a case to make a positive diagnosis. Both *Freichs* and *Murchison* agree in this opinion. In the case of a gentleman, in whom a scirrhus of the head of the pancreas was found pressing on the common duct just where it enters the duodenum, the only symp-

tom observable during life was slight dyspepsia.

Dr. Coskery thought diagnosis was possible in thin persons. In one case the diagnosis was made and confirmed on post-mortem examination. It was only after two or three examinations that he convinced himself of the nature of the disease. In fat persons it would be impossible.

Dr. Hill said his patient weighed 235 pounds when taken sick, and only became much emaciated a few weeks before death, during which time *Dr. H.* did not see the patient.

Dr. Michael said as *Dr. Hill* had not examined the alimentary canal thoroughly all the way down, he would hesitate to suppose this the primary trouble. Liver cancer is nearly always secondary. He had presented a year ago a specimen of cancer of the liver, in which the primary disease was in the stomach.

Dr. Winslow pointed out the fact that the tumor was very small in the case under discussion, whereas, in *Dr. Coskery's*, it was large; hence the diagnosis was comparatively more difficult in the former.

ERUPTIONS PRODUCED BY BENZOATE OF SODIUM AND OTHER DRUGS.—*Dr. Rohe* reported two cases, in which a pinkish eruption appeared during the use of benzoate of sodium. It had the appearance of erythema, had a well defined border, and was accompanied by itching and slight desquamation. The patients were a boy with diphtheria and a woman aged 35. The eruption disappeared on the discontinuance of the remedy. In the second case it was made to appear and disappear several times by the alternate use and disuse of the remedy. It was very likely to be mistaken for r  theln or measles.

Dr. I. E. Atkinson said this was an important subject. The eruption from quinine, so often observed during the last ten years, was overlooked entirely previously to that time. In a patient who had a recurrent attack of scarlatina, it was found that one-half teaspoonful of Huxham's Tincture produced invariably scarlet efflorescence and desquamation of the flakes of cuticle. The me-

dicinal cause of eruptions is very common and important and we should be on our guard for it.

Dr. Rohe also alluded to a patient who had a bullous eruption after taking the iodide of potash, which had been mistaken by his attending physician for pemphigus, and said that it was not generally known that this form of eruption was caused by the agent.

ABORTION—*Dr. Tiffany* mentioned a case of criminal abortion, which had come to his knowledge. The f  tus (one of three months) lived up to the period of the abortion, although the operation was done four weeks previously, and, as was found out, there was a wound in the abdominal walls from which the bowels protruded. The woman stated that she went three successive nights, upon all of which instruments were used. *Dr. T.* found the os much lacerated. The patient had been losing blood ever since the operation.

Dr. Ashby reported a case of abortion which took place in a hemiplegic woman of 35, about five or six months advanced in pregnancy. The f  tus was expelled in bed and without the knowledge of any of the attendants. She had been taking large doses of iodide of potash previously; could it have been due to this?

SYPHILITIC MENINGITIS.—*Dr. Arnold* reported the case of a young man who was suddenly seized with violent headache, at first remittent and then continuous. He had no fever, the pulse being remarkably slow and the surface of the body cool. There were no gastric disturbances. The pupils were much dilated, and did not respond well to light. The pain yielded to a hypodermic injection of morphia, under which the patient slept; but on awakening he became delirious and had paroxysms of maniacal excitement. Rigidity of the muscles of the neck and retraction of the head ensued, and on the tenth day death took place in a state of profound coma. No post-mortem was allowed. *Dr. Arnold* diagnosed acute meningitis. As a traumatic cause had to be excluded, the question turned upon the existence of either a tubercular or a syphilitic affection. There was a history of cough, expectoration, h  moptysis and wasting.

This spoke in favor of tubercles. But there were also present the unmistakable signs of constitutional syphilis. The total absence of febrile symptoms in the early stage of the disease appeared to decide in favor of an acute syphilitic meningitis. However, it is still an open question whether the main reliance on the differential diagnosis of cases of this kind should be placed in the presence or absence of febrile movements.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

The following concluding notes of the second day's session of the late annual meeting were mislaid at the time. They are now published to complete the report:

The day's session closed with the report of the Section on Sanitary Science, read by Dr. James A. Steuart. He first considered the subject of ventilation and the sources of contamination of the air of rooms. Stress was laid upon the importance of natural ventilation, and the open fire-place considered as superior to any other methods of accomplishing this. Much of the insanitation of the houses of the rich and well-to-do is owing to defects of construction. Traps were considered "a delusion and a snare." The only reliable method of getting rid of sewer gasses was said to be by forcing a current of air into the sewer and along it in the direction of its stream and out at the main outlet at a sufficient elevation to render them harmless to the inhabitants below. An ingenious method was described for effecting this, which consisted of a tall shaft, containing in its interior a fan, which is worked by a small stream of water.*

The impurity of the city pump water was referred to and its blame attributed to the want of necessary appropriations by the City Council.

The city drinking water was next discussed.

Under the subject Vaccination, the author stated that he regarded it as criminal for any one to neglect or refuse to avail himself of the protecting influ-

ence of vaccination. "If every man, woman, and child in a community were properly vaccinated there would never be a case of small-pox originating in the community."

EDITORIAL.

ENDOWMENTS.—There is no question relating to the growth and development of educational institutions, of more vital interest and importance, than that of *income*. To carry on the work of instruction upon such a scale as is implied in the term college or university, funds are essential. The demands for laboratories, libraries, and reading-rooms, for the proper compensation of the professorial and other staff; for the establishment of prizes, to stimulate the efforts and reward the talent and application of the students; for carrying on original investigations in science, and for repairs, improvements and additions to the buildings, must be met and met liberally, if the career of the institution is to be an active and progressive one. Nor is it alone necessary that the income for these and other purposes should be ample; it must also be *certain* and *secure*. It must, as far as possible, be independent, and beyond all reasonable liability to loss or extinction. The revenue from students, however large, will not suffice; for, besides its fluctuating and uncertain character, it involves a dependence which cannot be shaken off, and which is incompatible with strict justice and impartiality; which places obstacles in the way of improvement, and (in the case of medical schools especially) hinders powerfully the introduction of the so-much-needed reforms in the methods and scope of higher education.

The history of medical education in this country will show how much it has been influenced by the source from which the means were derived for carrying it on. Under the circumstances, little was accomplished, and little was to be hoped for in the way of improvement. The subject was vainly discussed year after year, all sorts of plans were proposed, and earnest and enthusiastic men sought to influence the professional mind and to excite the professional pride by senti-

*The "Sewer Ventilator," invented by Colonel Alexander, of Baltimore.

mental appeals. Meanwhile, the great lever, with which the structure alone could be raised, was unused and forgotten. At last our eyes are beginning to open, and the question of *Endowment* has sprung into sudden prominence. We see the impunity with which the three or four endowed schools can undertake reforms and press them to a successful issue, notwithstanding the losses sustained, and, on the other hand, we have a recent illustration of an honest, earnest effort (as we believe) on the part of an unendowed institution,* in the same direction, ending in humiliating failure. He is the best friend of medical progress, who does most to promote the endowment of our medical schools. *Endowment* is the key-note upon which the whole system of professional training must hereafter depend. In it, we find the only solution of the educational difficulties that so sorely beset us. In its presence, the impracticability of preliminary examinations, of a third term, of graded courses, of *educated* physicians, of *degrees that mean something*, and of enjoyment of public confidence and esteem, vanishes. *The solution of the problem of higher medical education is to be found in a single word—Endowment.*

SPECIALISTS AND GENERAL PRACTITIONERS.—The advantages to be derived from the limitation of study and practice to special departments, are conspicuous and incontrovertible, and the rapid development of medical science of late years is clearly traceable to it. President Hodgen, at the late meeting of the American Medical Association, however, points out very forcibly the disadvantages of the want of a thorough general training previously to entering upon such special work. In his epigrammatic language—"In the best sense, a specialist is a physician and something more; in the worst, he is something else, and something less than a physician."

This definition and distinction we thoroughly accept, and would cite the case of dentists—who are really nothing but medical specialists, and are so ranked abroad—as illustrating the truth of the latter clause.

*Bellevue.

Even under the most favorable conditions, however, the province of specialists must always be comparatively a limited one. They must necessarily form only a very small proportion of the great bulk of the profession, and they will always be confined to the cities, where the congregation of great masses of people will enable them to have access to a sufficient number of cases of the class of diseases to which alone they devote themselves, and where their services will be brought into requisition in connection with the colleges, hospitals, dispensaries, and in consultations.

Nor can we share the opinion, which some specialists seem to entertain, that intelligence and scientific attainments can exist only in those who pursue specialties. The vast majority of physicians, in the city, as well as country, must, as we said before, of necessity, be general practitioners, and it would seem very hard that they should be deprived—and by no fault of their own—of such qualities as we have named. Is it not possible that the *indispensableness* of specialists may be somewhat exaggerated? Cases must constantly occur, in which it is impossible to secure their aid, and we know the common sense and ingenuity (born or enforced by circumstances) of the country physician will often supply the want of instruments and special experience. We cannot help thinking that by the aid of a few of the best text-books (thoroughly mastered) and a moderate supply of the most essential instruments, the majority of physicians will find it possible to practice their profession *intelligently, creditably and successfully*. Should they fail in any case, no doubt their discretion will teach them the propriety of consulting their more experienced specialist brother, if he be within reach.

JENKINS' RUN.—This is a small stream which enters the city from its north-eastern suburbs, and then, partly through a sewer, partly exposed to the open air, runs a distance of about 600 yards to empty into Jones' Falls. Along the banks of this stream are slaughter-houses, breweries, factories, cow-houses, hog-pens and sinks, the contents of which it of course receives. Thus has arisen a most offensive

odor, which has greatly annoyed the persons residing in this vicinity, has impaired the value of property and caused some to move away. For a year or more efforts have been made to get rid of the nuisance. Finding, however, that nothing was to be hoped from the authorities, the citizens residing near the stream have taken the matter in hand, and by the advice of the Attorney-General of the State, have appointed a committee to find out the names of the persons upon whose premises the nuisances exist, and to bring their witnesses and complaints before the Grand Jury of Baltimore County in order that the offenders may be duly presented and prosecuted. Meanwhile, two of the citizens have been authorized by the State Board—in accordance with the act creating the Board—to apply to the Circuit Court of Baltimore County for an injunction to restrain and prevent the nuisance.

In defining the powers of the State Board, the Attorney-General states that they are rather advisory than executive, and that the offense in the present case is a criminal one, which can be *properly* dealt with only by indictment.

MISCELLANY.

THE PROGRAMME OF THE INTERNATIONAL MEDICAL CONGRESS, which will be held in London, August 2nd-9th, has been published. The greatest variety of attractions are offered in the way of sight-seeing, excursions, dinners, receptions, &c. The intellectual and scientific aspects have not been overlooked. Besides the work of the fifteen sections, the following addresses will be delivered in the General Sessions: "Le Scepticisme en Médecine, au temps passé et au temps présent," by Prof. Maurice Raynaud, of Paris; "Our Medical Literature," by Dr. J. S. Billings, of Washington; by Prof. Volkman, of Halle, title not given; "The Connection of the Biological Sciences with Medicine," by Prof. Huxley, of London.

SURGICAL TREATMENT OF ABSCESS OF LIVER.—The following summary represents the results of my investigations in regard to the surgical treatment of abscess of the liver: 1. The liver should always be aspirated in a case of suspected abscess, in order to verify the diagnosis. 2. Many small, and a few large, abscesses have been cured by one or more aspirations; hence this method should always be employed at the first exploration and we should then wait until it refills. If pus collects slowly and in small amounts, it may be again aspirated; if quickly, and in large quantities, aspiration is not to be relied upon. 3. Incisions should be made into the abscess cavity at the most prominent position of the tumor, whether in an intercostal space or not, and irrespective of the presence or absence of adhesions. 4. Rigid antiseptic precautions add much to the safety and certainty of a successful result. 5. When Listerism is impracticable good results will generally be obtained by a simple incision or puncture by a trocar and canula, followed by the introduction of a drainage tube and the daily use of carbolyzed injections. 6. Any of these methods are preferable to leaving the case to nature.—*R. Winslow, Annals of Anatomy and Surgery, June, 1881.*

HIGH HEELED SHOES AS A CAUSE OF BACKACHE.—I am certain that in women the most frequent cause of backache is leucorrhoea; and until this (whatever may be its cause) is cured, the backache will continue. My experience is that considerably more than half the married women, and very many unmarried ones suffer, off and on, from leucorrhœa. I believe, the most prolific cause of "whites" in unmarried women to be long standing on the legs and bodily fatigue. Another cause of backache is the wearing of high-heeled boots, which necessitates the continuous action of

the muscles of the lower part of the spine, in order to maintain the proper balance and erect position. I have had four such cases, and I know of another, all cured by discontinuing the wearing of high-heeled boots. It is really quite surprising what very serious symptoms may arise from such an apparently trivial cause.—C. D. H. Drury, in *British Med. Journal*.

LICHEN RUBRUM EXUDATIVUM TREATED BY SUBCUTANEOUS INJECTIONS OF ARSENIC.—Kröber exhibited to the Berlin Medical Society a joiner, aged 39, who had been suffering for a year and a half from this affection, and who had been treated with marked success by injections of Fowler's solution. The patient was first seen in May, 1880, when his back, from neck to lower border of thigh, his breast and abdomen, and, in less degree, his arms and forearms, were covered with innumerable dark-red, firm, shining, and for the most part conical-shaped elevations, which in some situations became confluent. The excessive itching prevented sleep and the patient was consequently much debilitated. On account of the weakened condition of the patient, it was considered inadvisable to administer internally the large doses of the remedy required in the treatment of this disease; consequently the subcutaneous method was selected. A mixture of liq. potass. arsenit., one part, aquæ destill., two parts, was employed, of which 0.58-0.82 (once 1.16) was administered daily. In five days 1.28 grm. of Fowler's solution, altogether, was injected. The patient had quiet nights after the first injections, whereupon he absented himself for a time. Returning afterwards, during eighteen days, 2.61 grm. more of the Fowler's solution was injected—this time diluted only with equal parts of water. After the third injection, the itching diminished markedly; after the fifth, the entire eruption was paler and flatter, and finally the itching entirely

disappeared, the patient slept excellently, and only exhibited on his trunk some brown spots, with a trace of flat elevations under the right scapula. Five and a half months later, the patient's general condition was good, and there had been no relapse.—*Deutsche Med. Wochenschr., and Centralblatt f. d. Med. Wissensch., March 26th.*

PRIZES.—The medical staff of the Massachusetts General Hospital offer a prize of \$400 for the best essay on Chronic Bright's Disease—to be awarded in 1881; competition general. The Alumni Association of the College of Physicians and Surgeons, of New York, offer to the graduates of that institution a prize of \$500, the subject to be chosen by those competing.

REMOVAL TO NEW YORK.—Notice is given in the last (May) number of the *Independent Practitioner* that hereafter that journal will be published in New York city. In leaving Baltimore for the great metropolis the *Practitioner* has our best wishes for its success and prosperity in its new field of labor.

WASHINGTON TRAINING SCHOOL FOR NURSES.—The third annual course of instruction in this institution terminated on the 24th ult., by the conferring of certificates upon three nurses—the first graduates of the school, and addresses by Dr. Toner and others.

FOREIGN MEDICINE.—Having free access to all the leading journals of the great European centres—London, Vienna, Paris, Berlin, Edinburg and Dublin, we will keep our readers freshly posted as to *medical progress* abroad. As soon as the journals are received they are thoroughly scanned and careful abstracts made.

PESSARY MADE OF FLESH.—Von Nussbaum proposes that a pessary be made by folding up the anterior wall of the vagina and securing with mattress needles.—*Centralblatt, April 9th.*

MEDICAL ITEMS.

The Baltimore medical societies have all adjourned until Fall.—The Massachusetts Medical Society celebrated its 100th anniversary on the 7th and 8th of June. Addresses were made by Drs. Samuel A. Green and J. Collins Warren, both of Boston.—The first regular medical journal ever established was "Les Nouvelles Découvertes sur toutes les parties de la Médecine," and appeared at Paris in 1679.==

Q. Quid est creare ?

A. E nihilo facere.

Q. Bene ; te doctorem creavimus.

—*N. Y. Med. Record.*

The 50th anniversary of Pirogoff's professorship was celebrated June 5th. —The New Orleans City Council has adopted the Waring system of sewerage by a vote of five to two.—The blood of Saint Januarius has again exhibited its periodical commotion in the presence of an august assemblage of ecclesiastics at Naples.—Antiseptic surgery is gradually gaining favor amongst French operators.—Skin disease is so common in China, owing to the crowded population and filth, that the Chinese have a proverb: "Out of ten men, *eleven* of them have the itch."—Dr. Keen, of Philadelphia, says: "The living model should form as indispensable a part of the means of illustration in the anatomical lecture room as the cadaver."—Dr. J. Marion Sims has been benefitted so much by his stay in Florida that he will start for Europe in a few days.—The important part of a medical library, that which will give it character and value, and for deficiency in which nothing can compensate, is its files of medical journals and transactions.—Billings.—The Japanese are at work upon a pharmacopœia.—Dr. Paul F. Mundé, of New York, has been elected professor of gynaecology in Dartmouth Medical College.—It cannot be too strongly impressed on

those who purpose providing themselves with electrical apparatus, that both galvanic and faradic appliances are necessary.—Bartholow.—Hippocrates fully described the method of reducing dislocation of the shoulder-joint by the heel in the axilla.—The first medical library in America was that of the Pennsylvania Hospital, established in 1762.—Dr. I. Bermann, of Baltimore, has an able article, on "Some Points on Staining in Toto and Dry Section Cutting," in the April number of Archives of Medicine.—The name of the New York Medical Journal will be changed July 1st to "The New York Medical Journal and Obstetrical Review."—The best portable constant battery, except the Laclanché (which is patented and can only be repaired by the agents of the owners) is Stöhrer's.—Bartholow.—Prof. Kedzie, president of the Michigan State Board of Health has been compelled by the press of other business to retire from the Board.—There are 44 students now attending lectures in the London School of Medicine for Women.—The first original separate medical work published in America was entitled "Cases and Observations by the Medical Society of New Haven County, in the State of Connecticut," New Haven, 86 pp. 8vo., 1788.—Dr. Walter Mendelson reports a case at the New York Hospital of a patient who entered in a starving condition, whose temperature taken in the rectum was only 90.6°. Dementia developed subsequently.—Dr. Turnbull, of Philadelphia, advises smokers who *must* expectorate to give up the habit at once.—The Peabody Library had, June 1st, 71,719 volumes, 2,325 of which were added during the year. Total cost of the library, \$224,970; amount expended during the last year, \$7,878.—We return our thanks to the *Baltimore Sun and Gazette*, and the *Independent Practitioner* for kindly notices of our journal and our new editorial arrangement.

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VOL. VIII, No. 5.

ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

ON THE TIME FOR OPERATING IN STANGULATED HERNIA.

BY O. J. COSKERY, M. D.,

Professor of Surgery, College Physicians and Surgeons, Baltimore.

(Read before Baltimore Medical and Surgical Society, May 18th, 1881.)

When we consider the immense amount of literature that we have already upon the subject of hernia, it would seem as if there were nothing more to say, but like so many of the more common things we meet with in practice, there always appears opportunity for "one last word." The word that I wish to say, and to which I shall pretty closely confine myself is, "when shall we operate in cases of obstruction of the bowels, as by hernia or otherwise," but more especially by hernia. My object is not so much to present anything new as to call attention to the old. Now we all know the answer to the above question. It is stated in every hand-book as follows: "As soon as we

are satisfied that the taxis will not relieve the obstruction, or where the symptoms continue after the use of the taxis and disappearance in part or entirely of the tumor," and perhaps when I have finished it will strike you that I have said little more. But, do we act up to this very proper dictum? I am sure that most, if not all, of us who have seen much of stangulated rupture have some reproachful recollections in connection with this one point—time of operation. If any of you have not, be thankful gentlemen and permit me to relate some experiences occurring to myself, of which, in two cases, at least, my conscience tells me I was to blame. If I can succeed, however imperfectly, in assisting you to decide as to when to operate, I will have done some good as an offset to former evil.

Some years ago a lady, who had had a small femoral hernia for years, forced down an extra quantity of gut which she could not reduce. The symptoms, so far as general constitutional disturbance was concerned, were not very acute, and seven days after the descent of the intestine, her

regular physician was called. He at once detected the lump, made his diagnosis, and I saw the patient the next morning. The condition then was as follows: vomiting rarely, never of fecal matter; pain slight, but constipation complete. On account of the non-prominence of discomfort, although the lump was plainly to be felt, I advised waiting. The next day the symptoms were, if anything, less marked and I began to congratulate myself upon the wisdom of my advice. Three days afterwards, however, the condition of the patient had changed so much for the worse, vomiting becoming persistent and the symptoms of peritonitis developing, that I had no choice and operated. There was no difficulty in reducing the gut and omentum after nicking the ilio-femoral ligament which tightly embraced the neck of the sac. The gut was not gangrenous though so long constricted. The patient grew steadily worse, and died of peritonitis sixty hours after the operation.

Another case was that of a young colored man, who gave the following history, the belief in the truth of which history, I am afraid, had much to do with his death. He told me that he had been sitting quietly reading and feeling no discomfort for one hour and a half, had put his book away and gone up to the third story to bed, and that only then did he feel some pain in his abdomen. That he did not know he had a lump in his groin until the medical gentlemen who were called to see him, and who, very properly, tried to reduce it under chloroform, informed him of the fact, that he had never had a lump before, (which piece of information subsequently proved false), that he had had some vomiting which had ceased when I saw him the morning after the symptoms had first come on; but that no stool nor even flatus had escaped, although the tumor was tense and elastic, had although I thought

I detected resonance upon percussion; still, in view of the history and the present condition, I advised temporising and the administration of calomel and opium. Under this with cold and position vomiting ceased entirely for 36 hours, but the pain at the umbilicus and complete constipation continued, and the tumor remained about the same size. On the fifth day, however, vomiting had become persistent, was once offensive, collapse had come on, and the patient was operated upon without more ado. The sac was very superficial and was nicked in the first cut, which was made by transfixion. The gut was healthy and easily reduced after relieving the constriction, which was principally at the internal ring. A large piece of much congested omentum was tied and cut off. As the patient was rallying from the chloroform, he vomited nearly a common tin basinful of stercoraceous matter. From this time all bad symptoms ceased for a time, and four hours after the operation a copious stool, the first of five days, was passed. Nine hours after operation it was noticed that the partial rally the patient had made was disappearing, his pulse became small and weak, and he quietly went out three hours afterwards, or twelve hours after being removed from the operating table.

Still another case was one to which I was called at night, three or four days after symptoms of strangulation had made their appearance. Although it was one that certainly demanded operative interference, yet, with that dread that I have of doing any cutting upon the human body by artificial light, I advised delay until the next morning, and then, when I did operate, the change for the worse was most marked. There were two tight constrictions, one at each ring, and the patient died 26 hours after the operation of the peritonitis, the constipation still complete.

As differing from these cases in its result I am glad to be able to report that of a lady of about 25 years of age, who was taken with symptoms of intestinal obstruction about one week before I first saw her. The attending physician had examined her for hernial protrusions and had found none. On the evening of my first visit true fecal vomiting had come on and was continuous. In *this* case I advised delay and the administration of calomel and opium, fully intending, however, in case the symptoms did not soon mend, to explore the abdomen. Improvement, I am glad to say, *did* take place, in about 36 hours, the bowels gave way suddenly, and the patient got thoroughly and rapidly well.

Let us examine a little more closely the three first cases, for the result in each of which, I am sorry to say, my conscience upbraids me strongly. There was no doubt of the presence of a protrusion in the common sites of hernia, and this protrusion was almost certainly a true rupture in all of them. In the first case, supposing that the tumor was hernial, and that the gut had been constricted, was it at all likely that return of the portion, down for a week, could or would return? I now feel certain that it would not, and regret that the mildness of some of the symptoms induced me to postpone what should have been done at once. By putting off the operation for three days the chances of gangrene of the gut were increased, and time was given for the development of the peritonitis from which the patient died.

In the second case I allowed myself to be misled by the history (I should mention here that after the operation it transpired, that, some years before, a lump had appeared in the groin of the same side, but that the patient had returned it himself). Still, in spite of the history above given, here was the lump, and here was also complete constipation. Had I operated upon the

first day, instead of the fifth, I feel morally certain that my patient might have recovered.

As to the third case I can only say that it shall not happen again, and I look back upon it now with a shudder of horror. Still, anyone who has operated at night, will remember the difficulty experienced in distinguishing the different structures, and will be disposed to feel some compassion for another so called upon.

We now come to the principal object of this paper. When shall we operate in cases of intestinal obstruction?—a point as may be observed by the above cases not so easily decided. As a guide for the future, I have laid down the following rule: Wherever the symptoms exist, together with the presence of a tumor at one of the normal sites of hernia, or where a tumor having existed for a longer or shorter time at one of these positions, becomes suddenly, under effort more especially, larger, *operate at once*, if said tumor and symptoms are not relievable by the taxis with or without chloroform or ether. But, it may be very pertinently asked, what *are* the symptoms of obstruction, as, say, by strangulated hernia? Of course we all know the classical answer, *constipation, colicky pains and persistent vomiting*, sooner or later becoming fecal. But shall we wait for this *combination*? No. The cases given above show only one common symptom—*absolute and persistent constipation*—and by this term I mean constipation not only of feces but of flatus. This being so then I would draw as a moral from my experience the following aphorism to slightly reiterate what I have said above: Given a case of *complete* constipation, together with the presence of a tumor that has suddenly appeared or increased in size in one of the normal positions of hernia, non-removable under the taxis, an incision, if only for diagnostic purposes, is perfectly

justifiable and is eminently proper. While this aphorism should have great weight, still it does not apply with so much force in cases of *internal* intestinal obstruction. I do not think I can do better, or more fully express the objects I have in view this evening, than to call your attention to a saying of Mr. Hey, of Leeds, one of the greatest masters upon this subject: "I have often," says he, "regretted operating for strangulated hernia too late, but never too early."

Before taking my seat I will, with your permission, allude to a matter closely allied to the subject in hand, and one that sometimes greatly annoys the young operator. It is in reference to the persistence of symptoms of obstruction after operation either by the taxis or by cutting. It is no uncommon circumstance that some or all of these symptoms do persist, even though all is clear. To give a case in point: A few weeks ago, an old lady, long subject to femoral hernia, for which she had never worn a truss, forced down an extra quantity of gut, which she could not return. The medical gentleman called in tried the taxis on two several occasions, but not succeeding, sent the patient to me for operation; all arrangements were made to that end, but under chloroform, on the operating table, another, and this time, a successful effort by the taxis was made, the greater portion of the tumor passing up with a distinct gurgle and slip. Just as this was accomplished the patient was taken with a vomiting spell, in which she threw up a large quantity of fluid matter presenting the yellow-ochrey color of stercoraceous matter but without the smell. This vomiting continued at intervals for nearly sixteen hours, but the pain was gone and the face of the patient was much brighter. The constipation continued *complete* for five days, although the patient was up and about. On this day a

clyster of warm water was given, which brought away a copious stool. Now, what convinced me that my taxis had been successful? Here was a lump still in the groin, here was vomiting for a time, and here, also, was complete constipation. My opinion that all was well was based upon the fact that we never expect to reduce ALL by the taxis, except in those very rare cases in which strangulation follows the first descent of the hernia, and time has not been given for the formation of inflammatory adhesions between the sac and its neighborhood. Again, there was the distinct gurgle and slip so pleasant, under these circumstances, to hear and to feel. But most of all were the altered expression of the face, and the disappearance of pains. If I might be allowed to add a fourth to the three classical signs of intestinal obstruction above alluded to, it would be the peculiar drawn expression of the face we all know so well, that old, old symptom, of serious abdominal disturbance. And if this symptom has been present in a particular case, together with the others, its disappearance alone I would consider strongly presumptive evidence of our efforts having been successful.

T. GAILLARD THOMAS opposes the use of *direct applications to the interior of the body of the uterus*, except in rare and exceptional cases, on the ground that they very generally fail to cure the disease, and are by no means void of danger. In their stead, he recommends for chronic corporeal endometritis, careful attention to the general state, removal of displacements, care of laceration of the cervix, extirpation, if possible, of any existing neoplasm, and if uterine enlargement exist, the free use of ergot.

ON SWEATING IN CERTAIN ANIMALS.

BY D. I. MCKEW, M. D., BALTIMORE.

(Note read at Stated Meeting of Clinical Society of Maryland, held June 3rd, 1881.)

During the discussion on scarlatina and the treatment of hyperpyrexia at the last meeting, some remarks I made, upon the unfitness of dogs and rabbits for experiments as to the effects of external heat upon man, were partly based upon the absence of perspiration in those animals. This assertion seemed to create very great astonishment, and was almost positively denied by gentlemen who "believed" they had seen dogs sweat in the chase, and under other circumstances. Unwilling to bear the reproach of having made statements which were incorrect, or which could not be substantiated, I have the pleasure of offering to the *Clinical Society* some references which may prove interesting and instructive to some of the members. *Gurlt*, who was the first to accurately describe the structure and function of the sweat glands in man, says, in an article on the subject (*Verg. Unters. über die Haut des Menschen und der Haus-säugethiere*, Müller's Archiv., 1835, S. 399):

"In the horse, the sweat glands of the prepuce and udder are larger than in man and the other domestic animals. They are oval, and so large that they may easily be seen by the naked eye. On other parts of the body, they are much smaller and elongated. Cattle have very small, round sweat glands, which are everywhere uniform and of the same size. In the sheep, they might be called large, in proportion to the very thin skin, although not really larger than those of the horse. They are the same in all parts of the body. The sweat glands of the pig are elongated (länglich), and like those in the hairy parts of the horse.

"On the hairless balls of the sole of the dog's foot, we find large roundish glands, larger than those of the palm and sole of man, but smaller than those on the genital organs of the horse. On the contrary, the sweat glands of all the hairy parts are very small, long follicles

(Baelge), which are very hard to find."

Gurlt suggests that the large glands of the sole of the foot secrete an odorous matter which betrays the track of the dog to his followers, as dogs thus scent the trail of other animals.

Dr. Henry Sewall, of the Johns Hopkins University, has been kind enough to investigate this statement of *Gurlt* for me, in so far as it concerns the dog, and writes as follows:

"I have examined sections of several (4) specimens of dog's skin, and have to leave the matter of the presence of sweat glands undecided. There are many tubular structures, composed of cells which lie close to hairs; but whether they are sweat glands, sebaceous glands or empty hair follicles, I cannot yet be sure. They agree with the imperfect representation, which *Gurlt* calls sweat glands. There are evidences for and against each of the possibilities mentioned above. From analogy one would most justifiably call them sweat glands."

This is all I have been able to gather concerning the histology of the question; and it would appear from both the statements of *Gurlt* and *Sewall* that, if the structures be really sweat glands, they are, at the most, rudimentary, and cannot subserve the purpose of sudoriferous glands in man.

That dogs do not sweat will be very plain to anyone who has observed them in the hot-box, during experiments on heat. Prof. Martin, of the "Johns Hopkins," tells me that he has never seen a dog or rabbit sweat. Dr. Sihler, in an article "On the So-called Heat Dyspnoea" (*Journal of Physiology*, vol. ii, No. 3), says, speaking of experiments in which the temperature was raised to 55° cent.: "To take a correct view of these experiments, one must remember that, under circumstances in which a man perspires, a dog's respirations increase in number. While we sweat to keep cool the dog pants to keep cool." And, in a letter received from him, he says: "I have never seen a dog sweat, although I have had him in very hot places, and used dogs with thin short hair at times."

In a very interesting article, "Ueber Hydræmie und Hydræmisches Oedem," by *Cohnheim* and *Lichtheim*, in vol. xcvi, of *Virchow's Archiv*, these authors

are very positive and explicit with regard to the absence of perspiration in dogs and rabbits. They state (page 121): "We have never observed sweat secretion either in dogs or rabbits; or even in sheep. During two experiments, however, which we made on a horse and a goat, abundant sweating occurred. And again (page 135): "Dogs and rabbits do not sweat. They have, indeed, sweat glands, but in a lower degree of development than in man; and in only a few spots (the hairless portions of the extremities), does their skin, in this respect, approach that of man."

Luchsinger, in Hermann's "Handbuch der Physiologie," vol. v, part 1, page 427, says: "Cats, rats and mice, do not sweat at all. The most favorable locality is the hairless sole of the cat; but I have never been able to find a trace of sweat elsewhere on the body, in spite of repeated trials and most careful shaving of the hair." (I would here remark that the same result was obtained in a case, in which Prof. Martin injected pilocarpin in my presence). "Dogs also do not sweat on the hairy portions of their bodies, and even very rarely on the naked portions of their paws. The hardened surface may be responsible for its non-appearance in the latter locality."

These authorities, I think, fully sustain me in the assertions made during my remarks, and are certainly worthy of consideration in any analogies between these animals and man, in the study of thermic phenomena. The sudoriparous apparatus in man is so vast in extent, and the amount of water, nitrogenous and hydrocarbonaceous excretion (the result of the exaggerated metabolism due to increased temperature), thrown off by the skin, of such vast importance in the study of the effects of heat, that conditions, under which such cooling and depuration do not occur, cannot fairly be taken to represent the condition of the human body. Another reason, applying especially to the rabbit, is the great variations of temperature to which that animal is liable upon the occurrence of slight disturbing causes or of changes in the temperature of the atmosphere. Thus Prof. H. Newell Martin has found the temperature of this animal to vary to an extent of 4° Fahr., with the rise and fall of the tem-

perature of the external air; and a similar disturbance may and does constantly occur from slight nervous perturbation. Upon taking up one of these timid little animals for the purpose of obtaining its temperature, if the thermometer be placed at once in the rectum, a record of 103° F. will be registered, whereas, if the rabbit be held gently on the lap for one hour or more, and its alarm quieted by gentle caressing, the disturbance of its vaso-motor centres will have disappeared, and the dilated vessels, having recovered their normal calibre, the temperature will be found, upon restoration of the normal condition of the cardiac and vascular structures, to have fallen to 99° F.* The dangers and uncertainties of studies of this kind are, I think, sufficiently plain to suggest caution in our deductions.

The study of animal temperature, and the investigation of the causes and consequences of its morbid elevation, are certainly objects of paramount importance, though it must be confessed that they are as yet surrounded by so many difficulties that it is at present, even with the greatest skill and care, impossible to arrive at definite and precise results. It is, therefore, specially desirable that all disturbing elements and conditions should, wherever practicable, be eliminated. Thus, only, can the value of experiment be exalted to its proper worth, and perfect confidence secured for the results of praiseworthy investigation. Clinical experience has repeatedly recorded temperatures of the human body, far beyond those, which studies upon brutes have declared fatal. What the controlling factors were in these cases, who can say? Even the pathology of the conditions known as "Insolation," in man, is by no means clear. How much of the fatality is due to exhaustion, from severe exercise or labor with accompanying exaggerated metabolism; to exhaustion of the sweat centres (wherever these may be), as evidenced by the arrest of the action of the

* May not this vaso-motor action be a means of cooling the blood of the animal, by throwing a large amount of blood into the dilated vessels of the surface? The blushing of the skin thus produced is very marked in the rabbit, and some cooling must be brought about in this way.

sweat glands; how much to improper food and beverages. to injudicious clothing, to the presence of excess of moisture in the atmosphere, are questions not yet solved, nor is it likely that their solution will be facilitated by applying hot poultices to the head of a dog or by roasting a rabbit in an extemporized oven.

Since the above was written, my attention has been called to the statements of Foster, in his Physiology, which are directly at variance with the authorities cited.

IS CHOPART'S AMPUTATION A JUSTIFIABLE OPERATION?

BY RANDOLPH WINSLOW, M. D.,

Demonstrator of Anatomy, in the University of Maryland. Baltimore, Md.

From Velpeau's Operative Surgery I learn that the origin of the medio-tarsal amputation of the foot, which is now universally known as Chopart's amputation, can be traced back to the ancient writers, and that several persons performed it before the time of Chopart, who first spoke of it in 1787. Notwithstanding the weight of the great authorities who have advocated this operation, it remains to this day one of those debated procedures, upon which much can be said pro and con. There is a good rule of conservative surgery which forbids the sacrifice of a greater portion of the body than is necessary for the accomplishment of our purpose; and in amputations especially is this rule imperative. Most recent writers lay down the maxim that all amputations should be performed as far as possible from the body, as the danger to life is increased in direct proportion as we ascend the limb. Mr. Bryant says: "Any form of amputation must be looked upon with disfavor that requires the removal of more of the body than is essential to carry out the surgeon's primary aim, and increases the risk of the operation, however good may be the stump secured." * * *

"My own conviction is, that however desirable it may be to obtain a model stump, the end is not sufficiently certain or important to justify the surgeon in adding one tittle to the risk of the oper-

ation, or in sacrificing more of the limb than the necessities of the case demand. I regard it as bad and unjustifiable surgery to perform a Syme's or a Pirogoff's amputation, when a Chopart's will suffice; to amputate a leg when the removal of a foot at the joint will answer the purpose; to remove a leg or thigh an inch higher than is absolutely called for." Why then should there be any diversity of opinion in regard to the advisability of this operation when the anterior portion of the foot is diseased and the posterior portion healthy? A brief review of the anatomy of the foot will help us to understand the questions at issue. The tarsus may be divided for convenience into two rows; the astragalus and os calcis forming the posterior row, the scaphoid, cuboid and three cuneiform bones the anterior. The sole of the foot is not normally a flat surface, but consists of two arches, one longitudinal, the other transverse; hence only certain portions of the sole touch the ground. The points of support of the foot are three, the tuberosity of the os calcis behind, and the heads of the first and fifth metatarsal bones in front. These arches are sustained by the long and short calcaneocuboid and inferior calcaneo-scaphoid ligaments, and by the tendons which pass into the sole, especially that of the peroneus longus muscle. The direction of the os calcis is not horizontal, but more or less oblique, as only its posterior extremity touches the ground. The astragalus, the only one of the tarsal bones entering into the formation of the ankle joint, rests upon the upper surface of the os calcis, to which it is firmly connected by the interosseous ligament. All the muscles of the fore leg, except the tendo achilles, have their insertion anterior to the medio tarsal articulation. Now, the opponents of this operation say that the insertions of the tendons anterior to the medio tarsal articulation being destroyed, there is nothing to antagonize the action of the gastrocnemius and soleus, and the heel will become retracted and the face of the stump point downwards, forcing the patient to walk upon the cicatrix, thereby inflicting much pain upon him. The advocates of the operation say this result may be prevented by attention to

the position of the leg during healing, or if this does not succeed, by tenotomy of the tendo achillis. But there is another objection, which is to my mind more valid than the last, and that is that as two of the points of support of the longitudinal arch of the foot have been removed, and only the posterior one left, the stump must point downwards on account of the oblique position of the os calcis, when the weight of the body is transmitted to the astragalus. Notwithstanding these grave objections, the operation is recommended by many of the greatest modern surgeons who, with a perfect knowledge of the anatomical difficulties involved, still consider the method one of great value. I will here state that I object to any methodized amputation of the foot, when by treating the tarsus as one bone, we can by saw and scalpel remove the diseased portion with less sacrifice of tissue; but sometimes the choice lies between removing the anterior portion of the foot at the medio-tarsal joint, or performing an operation further back, as that of Pirogoff, Syme or Hancock, and it is in cases of this kind that I am now discussing the expediency of this amputation. What are the advantages to be gained by this operation?

1. The normal length of limb is retained.

2. The ankle joint is retained and greater facility of locomotion enjoyed.

3. There is less danger to life, from the sacrifice of a smaller portion of the limb.

This operation was performed repeatedly by Mr. Syme, with the most satisfactory results, and without any inconvenience from retraction of the heel. Syme says (Principles of Surgery, 1832): "When once the anterior extremity of the longitudinal arch of the foot is taken away, no additional inconvenience results from removing a larger portion, so long as the posterior extremity of the heel is allowed to remain. It has been objected that the extensor muscles of the ankle joint, having no opponents left attached when amputation is performed through the tarsus, must draw up the heel, and point the cicatrix to the ground. But experience has proved that this unpleasant consequence is effectually prevented by the flexor tendons adhering to

the cicatrix; and the patient has no difficulty in adapting to the stump an artificial foot or stuffed shoe, with the assistance of which he walks nearly free from any perceptible lameness. The operation through the tarsus invented by Chopart has been very much neglected lately owing to these hypothetical objections, but deserves to come into more general use." It is proper to state that Syme subsequently preferred to perform the amputation at the ankle, which is now known by his name, not so much upon the ground that the heel became retracted, as on account of the liability of caries to invade the remaining bones and thus render amputation necessary. Velpeau, in commenting upon this operation, says: "Reversion of the heel is the inconvenience most complained of. This is a real difficulty. Lack of union by the first intention is the chief cause of this, and the best method of preventing it, consists in doing everything in our power to cause immediate union. Some have proposed section of tendo of the tendo-achillis, but when the flaps have been well constructed, and are well supported, retraction occurs only as an exception." Neither McFarlane nor Dupuytren had seen it, nor had Velpeau experienced it in his five cases; and Blandin only once in eleven amputations.

Prof. Wm. Gibson (System of Surgery, 1845) says "Many surgeons object to Chopart's operation, but it is so easily performed, and has so often succeeded as to render its merits unquestionable. Last year (1844) it was performed before the clinical class of the Philadelphia Hospital by Dr. Horner, and recently by Dr. J. F. May, of Washington, with perfect success, and under circumstances where the patient would have lost his leg if his case had been submitted to most of our surgeons." Prof. Henry H. Smith, now Emeritus Professor of Surgery, University of Pennsylvania, says of Chopart's amputation, that "in the hands of an anatomist it is one of the most valuable and scientific methods of amputating ever resorted to." Coming down to more recent publications, W. Farlie Clarke says Chopart's "is a good operation, and when a methodized operation through the tarsus is required the surgeon can adopt no better."

Mr. Thos. Bryant (Practice of Surgery, 1878) speaks of Chopart's as "an excellent and valuable operation, which should always be performed in preference to any higher measure when disease or injury is confined to the fore part of the foot. The great theoretical objection to it, the subsequent drawing up of the heel, and the consequent pointing of the stump, has very little weight, since it can be provided against by division of the tendo-achillis, at the time of the operation or subsequently, should the difficulty occur. Mr. Cock has performed this operation many times, and thinks most highly of it, and has never had to amputate subsequently on account of the pointing of the stump."

Mr. Erichsen says the "result of this operation is extremely favorable, the patient, by the aid of a properly constructed boot, being able to walk or even dance with very little appearance of lameness."

Prof. S. D. Gross (Surgery, 1872) says of the utility of this procedure in the class of cases under consideration—caries or injury of the anterior portion of the foot—"there can no longer be any doubt. I have employed it several times in my practice, and have seen it repeatedly executed by others, and in every instance that has come within my notice, the result has been most satisfactory. The stump, though short, is extremely useful, affording an admirable support to the limb, the person generally walking well without the use of a cane." In one of his cases the patient, a young countryman, was able in less than six months after operation to plough and do all the work of a farm-hand with the greatest facility and comfort. In order to prevent retraction of the heel, Prof. G. advocates keeping the gastrocnemius relaxed by placing the leg on its outer side over a pillow. The tendo-achillis should never be divided in anticipation of retraction, since it may always be effectually avoided if the requisite care be taken during the after treatment. Prof. D. Hays Agnew, in vol. ii of his Surgery, in speaking of the liability of retraction of the heel to occur, says: "This is not an insuperable evil. The division of the tendo-achillis, and the subsequent flexion of the stump

until the gap is filled up will correct the vicious position. The necessity for tenotomy may be avoided by keeping the leg in a flexed position until the flaps have healed."

In the article upon Chopart's amputation, in Cooper's Surgical Dict., we find the following language: "The method of removing a part of the foot at the junction of the two halves of the tarsus is one of considerable merit." * * * "I have seen several patients who had undergone Chopart's operation and walked exceedingly well afterwards. A black man was recently shown to me by my friend, Mr. Copland Hutchison, who had performed the operation, and in reality scarcely any limping was perceptible." Mr. Fergusson relates one case where he found it necessary to amputate a second time at the ankle joint, which was the only instance of painful stump after Chopart's amputation, which he had met with. Mr. Lane, the editor of Cooper's Dict., says: "Nevertheless excellent stumps do frequently result from Chopart's operation."

The preceding quotations have been from authors who are, in the main, advocates of the operation. The following authors do not think favorably of it:

Mr. Joseph Lister, in an article upon amputation, in Holmes' System of Surgery, characterizes it as being an undesirable operation in cases of injury, from the danger of retraction of the heel, and much more so when performed for caries as the ulcerative processes are apt to recur in the stump.

Mr. C. F. Maunder, in his manual of operative surgery, says: "In the natural condition of the foot, the weight of the body is received upon the astragalus and from this is distributed to the remaining bones of the tarsus and metatarsus; but when the latter are removed by operation, and the weight of the body is allowed to fall upon the stump, the astragalus is liable to become dislodged in a forward direction from the os calcis and to cause disorganization of the joint, bones and integuments, which are unduly pressed upon. To prevent this, Mr. Delagarde proposes to endeavor to get union of the tendon of the tibialis anticus to the wound, by fixing its free end there with a hare-lip pin."

I am unable to discard the evidence of the great men who have advocated this operation. Where can we find those who are entitled to speak with more authority than Velpeau, Dupuytren, Blanding, Fergusson, Erichsen, Bryant, Gibson, Smith, Gross and Agnew; and they, with many others, agree in placing a high estimate upon the value of this operation. What if the heel does occasionally draw up, or the astragalus and os calcis become carious? Do not equally as bad results attend amputations at other portions?

Have not all of us seen painful stumps upon which the patient could not walk; and caries occurring in what appeared at first to be a healthy part? We know that nature possesses much power to bind together, and render useful, parts which at first appeared useless. That many persons, who have undergone this operation, have had very useful limbs, cannot be doubted. This favorable result may be effected in part by the union of the anterior tendons to the cicatrix, as well as by the matting together of all the tissues in the process of healing.

But granting that the weight of the body does cause the os calcis to change position, and to be approximated to the ground in its whole length, instead of at its posterior extremity alone, an inspection of the inferior surface of the bone will show it to be well adapted for bearing the weight of the body. I think the evidence is conclusive that the operation is justifiable and ought to have a place amongst surgical procedures.

Mr. Bryant in discussing the merits of Syme's amputation at the ankle joint, says: "That the operation is good no surgeon will deny when amputation of the whole foot is called for; but to say that it will supersede entirely Chopart's operation is to say what I trust will never be true, for when the bones of the ankle joint and the joint itself are sound, no surgeon ought to take away the whole foot if any minor measure will suffice.

Where Chopart's amputation is applicable Syme's ought not to be entertained. As an amputation of the foot where the whole foot must be sacrificed it is admirable, but under no other

circumstances can it be recommended; that it is superior to amputation of the leg most surgeons will admit, upon the same principle that Chopart's is superior to it, on the principle of the least possible sacrifice of parts."

Chopart's operation is especially useful in cases of injury to the anterior portion of the foot, but may be performed for disease though not with an equal chance of success. But this last objection holds good in amputations performed elsewhere as well. The most important consideration, however, is whether we have any right to impose additional danger upon our patient, in order to make what we consider a more satisfactory stump. Bryant is very emphatic upon this point. "I regard it as bad and unjustifiable surgery to perform a Syme's or a Pirogoff's when a Chopart's will suffice." In conclusion I will briefly notice two Chopart's amputations which are known to have been performed in Maryland in 1880—one by Dr. G. Ellis Porter, of Lonaconing, Md, reported in the MARYLAND MEDICAL JOURNAL, September 15th, 1880; the other by myself at the University Hospital in August, 1880. On Aug. 17, 1880, Dr. Porter presented to the Alleghany County Medical Society a man who had had his foot crushed six months previously. Wishing to save as much of the foot as possible, the man being a laborer, Dr. Porter concluded to perform Chopart's amputation, "knowing full well what has been said pro and con by the different authorities in regard to this operation and its results." Having kept the leg flexed no retraction occurred "and the man walks in his bare feet without a cane, and runs with alacrity. He walks every day to his work, which is that of a coal miner. He makes full time, and in all emergencies handles his mutilated foot with as much alacrity as before the injury." All the members of the Society present examined the case and were unanimous as to the perfect result obtained.

Whilst very great success has been apparently gained in my case, I do not consider that a sufficient time has yet elapsed to determine whether the beneficial results will be permanent.

W. T., aged 14, had his left foot run over by cars, crushing the metatarsus and phalanges. The accident occurred on August 7th, 1880, and gangrene soon supervened. He was brought to the University Hospital, and as there was not enough healthy plantar flap to perform an operation anterior to the medio tarsal joint, the foot was disarticulated at that articulation. The only artery requiring a ligature was the dorsalis pedis. The flaps, owing to some sloughing, did not heal by the first intention, but the case did well, and he left the Hospital in a month. In three months he was able to walk upon the stump with ease. I examined his foot on June 1st, 1881, and found the stump in excellent condition, the thick integument of the sole forming an admirable pad upon which to walk. The heel is not at all retracted, and he is able to walk long distances without a cane and with a scarcely perceptible limp. He possesses perfect control over the functions of the ankle joint, having the power of flexing the stump upon the leg as well as of extending it. This can only be explained by the supposition that the anterior tendons had united to the cicatrix, and goes to substantiate the observation of Mr. Syme.

SANITARY TRACTS, COMPILED FROM MEMORANDA ON PRE- CAUTIONS AGAINST CON- TAGIOUS AND INFEC- TIOUS DISEASES.

BY C. W. CHANCELLOR, M. D.

Secretary of the Maryland State Board of Health.

NO. IV.

ON BATHING.

The objects of bathing are: 1. Cleanliness. 2. To remove fatigue, and augment physical strength. 3. To prevent and cure disease. 4. To counteract contagion.

1. *Cleanliness.*—This is so essential to health, and contributes so much to comfort, that it has been accounted a virtue "next to godliness." The people of this country, however, especially in the rural districts, though so much distinguished for the general neatness of their domestic economy, and the cleanli-

ness of their apparel, are too apt to neglect the use of the bath. Those parts of the body which are exposed to view are carefully and regularly washed; but the same attention is not always paid to the parts which are usually clothed. By this neglect the dead cuticle is permitted to accumulate on the skin, and often gives rise to a variety of cutaneous diseases, which, by simple ablution with either cold or warm water, might be prevented. In a moral point of view, Dr. J. S. Billings, in his report on the hygiene of the U. S. Army, presents the importance of cleansing the whole body in the following trite but forcible language: "A dirty man will, in most cases, be a discontented, disagreeable and dissolute man; for the condition of his skin has much more to do with a man's morals than is generally supposed."

2. *To Remove Fatigue.*—Hot baths were originally employed for the purpose of recruiting the body when exhausted by fatigue. Those who had been engaged in violent exercises, as was the case in some of the favorite amusements of the Greeks, found their exhausted strength renewed, and depressed spirits elevated by immersion in the warm bath. Nothing is more soothing and grateful after physical exhaustion than a bath of from 90° to 98°. Bruce, the traveller, says, that "in the intense heats of Abyssinia a tepid bath was more refreshing and invigorating than a cold one." The ancients, too, were of opinion that warm bathing increased their physical powers; hence hot baths were consecrated to Hercules.

3. *To Prevent and Cure Disease.*—In man, as well as in other animals, a soft and clear skin is the criterion of health, whilst unnatural dryness of the skin is one of the first and surest signs of approaching disease; it is not, therefore, surprising that improving the state of the skin is an effectual mode of preventing numerous complaints. A warm bath is useful by opening the pores of the skin, whilst a cold bath removes that morbid sensibility to air and weather which is the source of many diseases. But it may be proper here to observe that bathing requires much caution in its application as a remedy for disease. It doubtless may produce beneficial effects

in many complaints, yet there is scarcely one complaint in which it may not, if improperly used, prove prejudicial.

4. *To Prevent Contagion.*—Bathing is not only attended with success in several maladies arising from contagion, but there is every reason to believe that it is one of the best modes of warding off infection. Mr. Este states that he has been perhaps more exposed to contagious diseases than most people, but that he has invariably escaped; and he considers himself particularly indebted to the use of baths for a large portion of the health he enjoyed. (Este on contagious disorders). In an able paper, "On New and Additional Means for the Prevention and Eradication of Contagious Diseases," by Dr. Rolla, it is recommended "that individuals not yet affected should use the warm baths and adhere to a rigid system of cleanliness." Struve also maintains that bathing is a good defence against contagious poisons. The use of the warm bath is said to be more common among the French inhabitants of the West India Islands than among others, and to this fact may be attributed their greater exemption from some of the diseases which are so fatal in that climate. Perhaps if so useful a practice were universally adopted in the West Indies and in our own country the ravages of the yellow fever might be in some degree prevented.

Bathing refreshes the mind, invigorates the system, allays irritation, promotes, sleep and imparts a sensation of ease, activity and pleasantness. A person distressed in mind will derive more relief from a warm bath, and may drown his disquietude in it more effectually than by indulging in copious libations to Bacchus; for

"Even from the body's purity—the mind
Receives a secret sympathetic aid."

On the whole, bathing has been found so highly beneficial, and indeed is so necessary in some climates that its practice, at stated times, has been prescribed by some religious sects as a sacred ceremony which cannot be too rigorously observed.

It will appear from the preceding observation that bathing is so favorable to health that it ought to be encouraged

by every possible means. In every village or town, in every district there should be one or two houses where people might be accommodated with cold and warm baths; indeed, such a plan ought to be made a part of the general police of every city, town and village. At all events, some means should be thought of for establishing public baths in all cities and large towns on a scale corresponding to their population. The populace, as was the case in Rome, should be admitted to these baths, if not free, at least upon the payment of a very moderate sum.

At Boston, Massachusetts, there were in 1875 twenty of these establishments, to some of which the first ladies of the city daily resort in the summer months. To demonstrate the success of the enterprise in Boston, it is only necessary to give the number of the bathers who resorted to the public baths of that city in one year:

Whole number of men bathers.....	344,287
" " boy " 	825,117
" " women " 	56,524
" " girl " 	201,238

Total number of bathers..... 1,427,166

The cost of each bath, including all expenses for constructing new bath-houses and repairing old ones, superintendence, &c., amounts to only about two cents per bath. The baths are open daily from June to September 30th, as follows:

Males.—Week days, 5 A. M. to 9 P. M.; Sundays, 5 A. M. to 9 A. M.

Females.—Week days, 6 A. M. to 8 P. M.; Sundays, 6 A. M. to 9 P. M.

Each bather provides his own towel and soap. Female bathers are also required to furnish suitable bathing dresses, generally an inexpensive calico frock.

The average cost of constructing these baths is \$1,600 each. They comprise a covered oscillating house, to conform to the tides, which, in the harbor of Boston, "flow" about 12 feet. Within the middle of this floating structure is situated the swimming tank, from 30 to 40 feet in length, 20 feet in width, and about 4 feet deep. Surrounding the tank, through which the water flows freely and continuously, is a platform 3 to 5

feet wide. On one side there are dressing-rooms and on the other seats. Some of the houses are covered simply with an awning, which can be removed in the winter season, when the baths are not used. Others are open places upon the natural beach, with dressing-rooms built upon two sides of the upland, in the form of a right angle, sufficient for a large number of bathers. The total cost to the City of Boston of maintaining her public baths, twenty in number, is about \$30,000, or an average of \$1,500 each.

After the foregoing statements no comment is necessary to show the utility and popularity of public baths; and the introduction of such establishments in every city, town and village would not only be an advance step towards the higher civilization of the ancients, but would also be an important health measure which would be greeted with great favor by the public.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE

386TH MEETING, FEBRUARY 9, 1881.

INDURATION OF WRIST AND PALM.

Dr. Taylor.—This man, æt. 31, has an enlargement of the wrist, which I wish the gentlemen to examine. He is a cigarmaker, perfectly healthy, and there is no history of syphilis. These swellings have existed for more than a year. At first I was much puzzled, but now I think they are enlarged ganglia.

Dr. Chisolm.—They come under the general head of ganglia. The contents of one can be pressed into the other, thus showing communication between the two. In a case of my own the contents were like grains of rice, and the swelling was tapped from time to time to exhibit the matter to the students. This case probably needs tapping and the injection of iodine for its cure.

REFLEX PARALYSIS.

Dr. Caldwell.—A gentleman, 40 years old, had partial paralysis of one side of the face; the corner of the mouth hung a little and there was some supraorbital pain, but most of the pain was in the perinaeum. A thorough examination was made and a portion of the prostate

gland was found to be slightly enlarged and tender. I think the paralysis is dependent upon this irritation and enlargement, and is reflex in its character. He has been treated with galvanism, gelsemium, potass. brom. and tr. nux vomica, and is much improved. I rely upon galvanism to reduce the enlargement.

Dr. Arnold.—A gentleman, over 50 years of age, had hemiplegia for two years and a-half, and from concomitant symptoms I thought there was softening of the brain from embolus. There was retention of urine and when the catheter was used painful contractions of the right leg with some oscillation and trembling were produced, which would pass off when the catheter was removed. I attributed this to reflex action from irritation of the urethra. Hughlings Jackson, Nothnagel and Rosenthal are believers in reflex paralysis. That an irritation should produce an opposite effect, viz: paralysis, is the reason that efforts are made to explain by reference to other causes. It is difficult to understand how an enlargement of the prostate could produce facial paralysis. If it produced paralysis at all we would expect the lower limbs would be the parts to be affected.

Dr. Chisolm.—In eye diseases we frequently have reflex symptoms; irritation of one eye producing paralysis in the other. By the removal of the diseased eye vision can be restored to the other in a few days.

SARCOMA OF EYELID.

Dr. Chisolm.—A child, five years old, about one month ago was brought to the hospital with a tumor of the lid, which had been discovered only a few days before. The tumor was attached to the under surface of the lid by a pedicle containing large blood vessels. It was as large as a cherry, and full of blood vessels. No pain was produced by its presence. For fear the hemorrhage might be dangerous, I placed a ligature loosely around the mass in preference to removing it by the knife. On the next day it had not lost its color but was of a deeper red. Some of the blood vessels had given way and the bandages were soaked with blood.

Nothing more was done at that visit beyond giving iron for the anæmic condition. In a few days the tumor was of a slightly ashy hue. Two days later it protruded between the lids, and a ligature was applied which cut through the mass and it fell off. The eye was examined and was found to be in a healthy condition except a slight ashy appearance of the cornea, for which lotion of boracic acid was used. Upon the child's return, two days later, the cornea was entirely eaten away. It is singular that the slight pressure of the tumor should produce such destructive changes. The tumor was examined microscopically and found to be a sarcoma containing both round and spindle cells, and is nearly certain to return. It is three weeks since the tumor was removed and now it is nearly of the original size. The cornea has been replaced, but vision is lost and probably life may be destroyed. Billroth says these tumors are common except on mucous membrane, yet here we have a comparatively trivial growth threatening the life of the child.

ABSCESS.

Dr. Evans.—Three or four months ago I was called to see a lady, aged 30; married; the mother of four children, one of whom, nine months old, was still at the breast; always had good health up to the present illness. After her confinements the menses usually appeared within six months, but at the time I saw her they had not been present since the birth of her last child. She was taken with a chill and severe abdominal pain, and a medical gentleman who attended her for eight weeks pronounced the case to be one of Bright's disease and said that it would be fatal. When I saw her there was great dyspnoea, anasarca and almost complete suppression of urine, half teacupful of coffee-colored urine being passed in the twenty-four hours. I feared to give her diuretics, but gave one drop of croton oil every two hours until free watery evacuations were produced. In the evening she had passed a bucket full of water, and was much relieved. The next day I repeated the oil with

manifest benefit; then 3i. fl. ext. jaborandi which produced profuse diuresis. The kidneys had recovered from their engorged condition and the urine flowed freely; then potass. bitart. was used to keep up the flow. All this time there was no pain, and the improvement continued for ten days, when the dropsy reappeared, and the croton oil was repeated for two days. She then complained of pain, and fluid ext. juniper was used as a diuretic. On the next morning she had a hemorrhage from the bowels and passed a large quantity of pus. The flow of pus continued for several days but gradually lessened in quantity. I think she passed several gallons. She made a good recovery and is now well. I do not think she had Bright's disease.

Dr. Percivall.—I do not think it was abscess of the kidney. The wife of a great friend of mine, two weeks after her second confinement, discharged a quart of most offensive pus, which, I think, came from the fallopian tube. She got well, but had no more children. I had a negro woman who died, and upon post-mortem an abscess of the fallopian tube was found which contained two quarts of pus. These abscesses are sometimes two or three months in forming.

Dr. Rohe.—It is a pity that the early history of Dr. Evans' case is not clearer. As it occurred subsequent to parturition it seems likely that it was a pelvic abscess. It is not unusual for these abscesses to occur in this location, and several distinguished gynaecologists have diagnosed ovarian tumors which afterwards proved to be abscesses.

Dr. Arnold.—It is curious that the first physician diagnosed Bright's disease and that Dr. Evans did not make a diagnosis is equally strange. Abscesses following parturition are very common and the collection of pus might press on the abdominal vessels and produce anasarca. I recall a case which I saw in consultation with Dr. Regester, in which there were rigors, sweats, anasarca in the lower extremities and some albumen in the urine. The abscess broke and large quantities of pus were discharged. The venous congestion produced the albuminuria.

Dr. Evans.—The woman was perfectly well for nearly nine months after her delivery. It would be rather singular for an abscess to exist that length of time and show no signs of its presence.

Dr. Rohe—There are cases on record which lasted one or more years without constitutional symptoms pointing to collection of pus.

Dr. Chambers.—If it was a pelvic abscess we might expect to find dropsy of the lower extremities, but it does not explain why the upper extremities were also dropsical.

Dr. Reid.—It is fortunate that Dr. Evans did not make a diagnosis. If he had been sure that it was a pelvic abscess he might have called in a gynecologist to aspirate or a surgeon to open with his bistoury, and the result might not have been so favorable.

OPIUM POISONING.

Dr. Chambers.—I was called to see a lady who had taken 3i. of laudanum; gave atropia gr. half, and she got well. There was but little walking and slapping and therefore not much exhaustion. I gave a man two grains of atropia in eight hours and he recovered.

Dr. Taylor—In the case of the lady the druggist suspected her of intending suicide and gave plaster of paris instead of arsenic, and the laudanum was very much diluted.

Dr. Chambers.—She had the physiological symptoms of opium and it is not important whether she had taken it or not. There was pin point pupil, pulse 50, respiration 8. The atropia was given to produce its physiological effects.

387TH MEETING, FEB. 16, 1881.

INCIPIENT INGUINAL HERNIA.

Dr. Monmonier.—I was called in consultation by Dr. Brinton to see a man, seventy-five years old, who was suffering from obstruction of the bowels, vomiting of fecal matter, &c. Upon examination no swelling was found at the external abdominal ring; some slight oedema; no globular mass could be detected; no tympanitis. The finger could be passed through the external ring into the inguinal canal. The diagnosis of strangulation at the internal

ring was made and an operation was advised. The doctor did not think an operation was desirable then, and the matter was postponed for a few hours, during which the man died. Upon post-mortem examination the small intestine was found fixed in the internal ring. The bowel was much contracted, a condition frequently seen in the aged. The constriction did not embrace the whole calibre of the bowel, about one-third of the circumference was firmly pinched by the ring. There was no peritonitis; the man died from exhaustion.

Dr. Brinton.—The reasons why I did not acquiesce in Dr. Monmonier's desire to operate were that the patient was very much opposed to any such measures and the doctor and myself were not positive that it was strangulated hernia. I thought a few hours delay would be better. The diagnosis was not sure until late in the evening, and then the patient was very much depressed and died shortly afterwards.

ABSCESS OF TONSIL.

Dr. J. H. Hartman.—A young adult had severe pain in deglutition and a burning feeling in his throat. His father thought he had quinsy and under the use of gargles and domestic remedies he seemed to be doing fairly until a day or two before he came to me. The left tonsil was swollen as large as a pigeon's egg and there appeared to be deep-seated inflammation. The swelling was opened freely and much pus escaped. Further inspection revealed a white substance in the tonsil which, upon extraction proved to be a piece of wooden toothpick about a half inch long. This is the first case of the kind that has come under my observation, although many cases are reported in the books. Fish bones, tooth-brush bristles, apple seeds, &c., have been found in the tonsils and have produced abscess. I have frequently, in excising the tonsil, met calcareous concretions, sometimes as large as a bean. More than once I have been compelled to remove the tonsilotome and finish the operation with a bistoury.

Dr. Cathell.—Under what circumstances does Dr. Hartman decide to remove the tonsils?

Dr. Hartman.—I never remove the acutely congested tonsil. In chronic hypertrophy if the tonsil project half an inch beyond the arches of the palate it should be removed. The operation is not troublesome and the hemorrhage is slight. I have operated nearly three hundred times.

NEURALGIA.

Dr. Brinton.—I attended a lady in her second confinement. The labor was natural and not severe. The day after her delivery an intense neuralgia of the fifth pair of nerves appeared and has continued in spite of all treatment. The pain appears at eight o'clock every morning and lasts until three in the afternoon. I gave quinine in ten grain doses, four times a day without relief. Aconite, belladonna, chloral and gelsemium have been used. I gave 3i. of tr. gelsemium every two hours without effect. Thinking the preparation inert Squibb's fl. ext. was used in five drop doses, gradually increased to twenty drops. Of this 3iiss. were used before the physiological effects were observed.

Dr. Morris.—In a similar case, in which a lady had an attack every morning, I used quinine in small doses without effect, but giving twenty grains one hour before the expected seizure promptly cured it.

Dr. Hartman.—Ringer recommends tonka. I have not used it.

Dr. Brinton.—I gave quinine in ten grain doses, frequently repeated; had cinchonism, but no cure of the neuralgia.

Dr. Morris.—There may be some inflammation or interference with the nerve. In a case in which everything had been tried relief was obtained from potass. iod. and bichloride of mercury.

Dr. Ashby.—If dependent upon syphilis, potass. iod. will relieve. Tonka is a remedy largely used by the Feejees; it is a combination of leaves. It is highly recommended, but personally I know nothing of its value.

Dr. Monmonier.—Beard recommends phosphide of zinc. I have used salicylate of cinchonidia with benefit.

Dr. Chambers.—As an empirical remedy I think Fowler's solution hypodermically has much to recommend it. The periodicity in this case is against the

opinion that there is inflammation; there would also be some tenderness.

Dr. Scarff.—In one of my cases facial neuralgia came on just before the child was born and lasted four days. It was relieved by ergot and hyoscyamus.

REVIEWS & BOOK NOTICES.

Hydrophobia. By HORATIO R. BIGELOW, Washington, D. C. D. G. Brinton, Publisher. Philadelphia, 1881. Cloth: Pp. 154. Price \$1.00.

This volume presents in a compact form, and exhaustive manner, the literature pertaining to the subject of hydrophobia. The bibliography of the subject is so extensive that the necessity for a practical work of this character has long been recognized. In American literature an exhaustive treatise has never been published on the disease, the sum of all that has been written in this country being confined to scattering reports in medical journals and occasional newspapers. The library of the Army Museum, in Washington, alone contains over three thousand treatises and articles bearing upon the subject, but none presenting a systematic statement of the history, symptoms and treatment of the disease as is set forth in this volume.

The author has drawn on this immense store-house of literature for the subject-matter of his book, and by a most careful collection of facts and faithful inquiry into the subject, he has succeeded in arranging and compiling a treatise which cannot fail to be of great value to the physician, veterinarian and intelligent general reader. His researches have been extensive, and he presents them in an easy, clear style, free from pedantry or strained effort, yet thoroughly accurate and scientific. The volume is arranged in eleven chapters, beginning first with the nomenclature, then with the history, showing the great antiquity of the disease and the reference made

to it in classical literature, with a careful collection of statistics illustrating its prevalence at different epochs. The third chapter treats of its pathology and morbid anatomy, in which will be found statements of the opinions which are held in reference to the *modus operandi* of the virus, the structural alterations observed in those affected, and the position which the disease will hold in the category of curable complaints. Chapter four treats of incubation, influence of age, sex and climate; chapter five, of symptoms, diagnosis and prognosis, and chapters six, seven and eight are devoted to treatment, preventive and curative, and the precautions to be taken against it. In chapter nine, we are told "how to recognize a mad dog." Chapter eleven, on "The Most Recent Views of the Pathology and Treatment of Hydrophobia," closes the volume.

In view of the terrible and distressing nature of this disease, and the need for a systematic work upon the subject, the profession is indebted to Dr. Bigelow for a work of decided merit, and for his faithful effort in presenting such a clear and practical treatise. The volume costs only one dollar and should be added to every physician's library.

The Principles of Myodynamics. By J. S. WIGHT, M. D., Professor of Surgery and Lecturer on Physical Science at the Long Island College Hospital. New York: Bermingham & Co. 1881. 8 vo. Pp. 162.

This little volume embodies an attempt to analyze the principles of myodynamics, or the forces and effects of muscles. Myostatics relates to this force when in a state of equilibrium and myokinetics when in motion. The principles of the lever, the parallelogram of forces, the inclined plane, and the wheel and axle, are thoroughly explained, and their application to the muscles of the extremities, and to the

bones and joints pointed out. In fact, the work might well be called the *physics* of the muscles. It shows a more thorough working up of the subject than has been done before (to our knowledge, at least), and will doubtless conduce to a better and more scientific treatment of fractures, dislocations and deformities. It is well worth careful study, especially by those who are engaged in the practice of surgery. We cannot help thinking, however, that a little less technicality would contribute to the sale of the book. It is well illustrated, and handsomely bound in cloth.

BOOKS AND PAMPHLETS.

Tenotomy in the Treatment of Congenital Club Foot. By AP. MORGAN VANCE, M. D. New York, 1881. 8vo. Pp. 21.

Census Bulletins, Nos. 191 and 192. 8vo. Pp. 8.

The Decimal System of Writing Prescriptions. By C. H. MERRICK, M. D. Canyonville, Oregon. 12mo. Pp. 8.

Sixth Annual Announcement of Meharry Medical Department of Central Tennessee College. Nashville. 1881. 8vo. Pp. 8.

Spasm of the Intra-Ocular Eye Muscles. By J. J. CHISOLM, M. D. Baltimore. 1881. 8vo. Pp. 10.

Simple Methods to Staunch Accidental Hemorrhage. By EDWARD BORCK, M. D. Evansville, Ind. April, 1881. 8vo. Pp. 4.

The Surgical Treatment of Abscess of the Liver. By RANDOLPH WINSLOW, A. M., M. D. Brooklyn, N. Y. 1881. 8vo. Pp. 7.

The Asylums of Europe. By GEORGE M. BEARD, A. M., M. D. Cambridge. 1881. 8vo. Pp. 12.

EDITORIAL.

THE TONER LIBRARY: OUR OPPORTUNITY.—It is already very generally known among the profession of this city that the library of Dr. Joseph M. Toner, of Washington, an ex-President of the American Medical Association, Honorary Member of the Medical and Surgical Faculty of Maryland, and originator of the Toner Lectures, Washington Training School for Nurses, and other beneficent enterprises, has been offered to us upon certain conditions. This library consists of about 22,000 titles, and is at the same time one of the largest and most valuable collections of medical works in America. In some respects we may say that it has not an equal in the world.

Dr. Toner belongs to that class of men—bibliophiles—to whom, as was said of St. Jerome, books are as necessary as their daily bread, and in the course of a long life now verging towards a serene and prosperous sunset, he has gathered together, from every corner and nook of the land, a vast body of literature, illustrating American medical work and progress from the earliest colonial days, liberally supplemented by more modern writings. It is worth a visit to Washington, if only to see this rich display of literature, which fills every portion of the good Doctor's house, and in the midst of which he presides with all the grace and dignity of an ancient patriarch amongst his numerous household. This library, as we have intimated, is offered to the profession of Baltimore, upon certain conditions, that are neither unreasonable nor impracticable of fulfillment. It is especially required that we should provide a *fire-proof building* for its reception, which must be constructed with the distinct understanding that it shall never be mortgaged, nor its possession otherwise placed in jeopardy. Accompanying the gift will be an endowment of a lectureship, sufficient to secure an annual lecture from the ablest men in the profession. Furthermore, it may be added, it is not unreasonable to expect that the donor will, at some future day, follow the gift of his dearly-loved books, those "perennial repositories of the

mind," with some endowment or bequest that will render them more effective for good, and secure us more completely in their possession.

It is scarcely necessary to say that we have never had such an offer before, or that it is not likely we will ever see it repeated. To neglect to avail ourselves of it now would be an indelible stain upon this generation of physicians, with which posterity would never cease to reproach us. We *must not* allow ourselves to entertain for a moment any other thought but that of securing as speedily as possible the gift which has been so generously and unexpectedly placed at our disposal. We *must* hasten to decide upon the best mode of raising funds for the proposed building. We *must* utilize our own resources to their utmost, and then, if necessary, call upon others—the wealthy and liberal citizens—for aid. Each individual among us must be taught to feel that it is his duty to cooperate in this work, which, if successful, will give us at once a *great medical library* of which we can justly feel proud, and which will exert untold benefit upon the generations to succeed us, for ages to come.

OBSTRUCTIONISTS.—There are many and diverse sorts of men in the world, but the hardest one to be patient with is that sort that is always placing obstacles in the way of human progress. It is hard enough to bear with indifference, but when we meet with open opposition to measures, the wisdom and expediency of which we cannot for an instant doubt, it is impossible to repress one's indignation. There are such men in every community, and we regret to have to believe that this great and prosperous city is not entirely exempt from them. What plan destined to promote the general good does not meet with ridicule or derision? What cooperation asked in measures that will unite us more closely together and strengthen our influence, that is not refused? What contribution of time or money necessary to carry on the most essential undertaking, that is not denied? Opinions are often stated without reserve that are unworthy of an enlightened age and country. The disinterested acts of the most public-spirited

and unselfish men are frequently credited to unworthy motives.

Policy demands that we should bear with such men—that we should endeavor to convert them to right principles and better motives; if we fail in this, let us not think for a moment of compromise, but oppose them with all the ardor derived from a consciousness of our own rectitude, and the confidence arising from the conviction that they are contending against the inevitable fiat of destiny.

Brothers in the profession, let us see to it that none of us are to be found in the ranks of those that are vainly striving to stem the tide of human progress; but let us—by tongue and pen—by precept and example—by time and means—in season and out of season—to the extent of our ability, strive to strengthen and perpetuate all that is good and true and useful in our most noble profession.

ARRIVAL OF RELIGIOUS ORDER OF NURSES IN BALTIMORE.—Three sisters of the French order of "Bon Secours" have recently arrived in Baltimore, and have established here the first foundation of their order in America. They came upon invitation of a number of prominent citizens of this city, who felt our great need of trained and educated nurses. These sisters attend all classes of diseases and give their services free of charge. They are said to speak English with perfect ease and correctness; and we have heard them very highly commended for efficiency and the thoroughness with which they carry out the directions of the physician. No doubt the high standard of excellence set by these accomplished sisters will have the effect of raising the tone of nurses in general, a class in whom there is much room for improvement. In this connection we regret to learn that the training school for nurses, established in this city last year, has been suspended after the close of its late (second) session.

LACTOPEPTINE.—The season of the year is at hand during which infantile complaints are most prevalent. The profession will find in Lactopeptine a most valuable agent for summer diarrhœas, and digestive disorders in young

children. We have used it with much success in cholera infantum, and have found, that, when combined with an equal proportion of the Sub. Nit. of Bismuth, it seldom failed to control this disorder. We commend it as worthy of most careful trial.

MISCELLANY.

HYSTERICAL APHONIA.—There are several methods of procedure. The larynx may be stimulated by direct application, the electrodes resting on either side of the organ, and a succession of shocks transmitted by the faradic, or an interrupted galvanic current. The muscles of the larynx may be reached, also, by placing the anode over the course of the recurrent laryngeal, and the cathode over the larynx, and interrupting the current by cathodal opening and closing. The larynx, however, may be much more effectually acted on by the intra-laryngeal electrode. This procedure is to be preferred in cases of aphonia due to paresis or paralysis of the vocal cords, but in hysterical aphonia, the mental impression made by faradic applications is an important factor in achieving a curative result, and may be as decided by external as internal applications. — *Bartholow's Medical Electricity.*

TRANSPLANTATION OF BONE.—Before the Glasgow Pathological and Clinical Society, April 12th, Dr. Macewen showed a patient upon whom transplantation of human bone had been performed, whereby over two thirds of the shaft of the right humerus was restored. The grafts were taken from six wedges of bone removed from six limbs of patients affected with anterior tibial curves, and were reduced to very small fragments previously to insertion. The shaft was completely restored, and the right humerus only measured one-half inch less than the left.—*British Medical Journal, May 21st.*

BILLROTH'S PATIENT DEAD.—The patient on whom Billroth operated, January 29th, for cancer of the pylorus, died May 23rd, symptoms of a return of the disease having shown themselves three weeks before. The autopsy revealed a recurrent colloid cancer, which in all probability had arisen from the retro-peritoneal lymphatic glands and had spread over the entire abdominal peritoneum. The outer surface of the stomach, the transverse colon, as also the neighboring parts of the duodenum and jejunum were covered with colloid cancer, so that it was difficult to isolate the stomach and duodenum. The stomach was of a natural shape, so that no one would have suspected that a piece five and a half inches long had been removed from it. A sort of sac like dilatation was found in the site of the greater curvature; notwithstanding this, however, the patient had borne and digested her food well up to the time of her death. There was no stenosis at the point of union of the stomach and duodenum, and it was with difficulty that the line of suture could be distinguished.—*Deutsche Medizin. Wochenschr.*, June 4th.

WEST VIRGINIA BOARD OF HEALTH.—On the 8th of June, the "act to establish a State Board of Health and regulating the practice of medicine and surgery," went into effect. The Board consists of two physicians from each Congressional district, six in all, who are appointed by the Governor. Besides the very extensive sanitary powers conferred upon the Board, all physicians in the State are required to obtain a certificate and to pay \$10. Those who have no diplomas are required to undergo examination, except when they have been practising ten years. This law is an admirable one, and reflects great credit upon its framer, Dr. Reeves, of Wheeling, to whose efforts its passage is chiefly due. It now only remains to see that it is sufficiently carried out.

THE editor of the *British Medical Journal* (May 14th), after quoting the most recent writers upon the origin and nature of sarcoma and carcinoma, concludes thus: "When we can see, from the above, how radically these recent observers differ in their opinions, not only as to the difference between sarcoma and carcinoma, but also as to the origin, development, physiological power, and ultimate destiny of all the normal elements, whence either or both forms of tumor may or may not arise, we can only conclude that the question is as unsettled as ever. Free from all preconceived opinions, and well versed in practical histology, the next observer, should he honestly desire a nearer approach to the truth, must begin afresh, unfettered by any superstitions about epiblasts or mesoblasts, unprejudiced by any belief as to what epithelium and connective-tissue cells can or cannot do. And, above all, let him be first certain what these cells really are, before he uses such terms as epithelioid or connective-tissue type."

ANOTHER SUCCESSFUL CASE OF RESECTION OF CANCEROUS STOMACH.—On April 8th, Dr. Wölfler, assistant to Dr. Billroth, performed resection of a cancerous pylorus on a woman aged 52. The case was regarded as favorable for the proceeding, on account of the mobility of the tumor, which was apparently about the size of a hen's egg. The operation, which lasted two hours, was not followed by fever, nor by vomiting, and the patient was able to take fluid food two days later. On the tenth day, she ate, with good appetite, a veal cutlet; and a fortnight after the operation, was in a most satisfactory condition. The wound in the abdominal wall had healed by first intention, and without any constitutional disturbance.—*Wiener Medizinisch. Wochenschrift*. Billroth has repeated the operation twice since his first successful case, reported

in the *Md. Med. Journ.*, May 1st. Both patients died, the first on the 8th day, the second in about 12 hours.

ŒSOPHAGOSCOPES.—At the meeting of the Royal Society of Physicians, of Vienna, held May 6, Prof. Störk exhibited his improved œsophagoscope. Fastened to the staff which is to be introduced into the pharynx, is a straight metal tube, which takes the place of the former elastic tube. The metal tube consists of three tubes, which fit into each other; these, by means of a screw arrangement, can be extended so that the tube acquires a length of eight inches and will reach to the cardia.—*Wien. Medizin Wochenschr.*, May 14th. Dr. Morrell Mackenzie has invented an œsophagoscope with which a person can view the lining membrane of the œsophagus and possibly even catch a glimpse of the stomach. The œsophageal part consists of two parallel bars, which, after introduction, are opened by an arrangement at the handle and rings separating the bars. A laryngoscopic mirror is attached to the end of the handle.—*Brit. Med. Journ.*

A COMMISSION appointed by the French Academy of Medicine has reported, through M. Villemin, confirming all the facts announced by M. Pasteur, with reference to the production of charbon by inoculation of the earth taken from places where animals affected with this disease had formerly been buried. Pasteur, offended by the tone assumed by some of the members, has withdrawn temporarily from the discussions of the Academy.—*Gaz. Hebdom.*, May 20th.

LISTERISM IN LYONS.—M. Letiévant reports that since the adoption of Listerism in the Hôtel Dieu, at Lyons, the mortality in the surgical department has diminished from seven to four per hundred.—*Gaz. Hebdom.*, May 27th.

FATAL RESULT FROM THE APPLICATION OF SAYRE'S JACKET.—The patient, a child, suffered from a considerable kyphosis at about the junction of the dorsal and cervical vertebræ. It was restless during the suspension; suddenly the breathing stopped. Immediate tracheotomy showed the trachea free down to its bifurcation, and consciousness could not be re-Breathing stored, and the child died one and a half hours after the suspension. Autopsy revealed a very marked angular curvature of the spine and a very large abscess reaching to the mediastinum.—*Sonnenburg—Proceedings of German Surgical Society; Deutsche Medizinische Wochenschrift*, May 28th.

THE *Boston Med. and Surg. Journal* dedicated its number of June 5th to the Massachusetts Medical Society, in honor of its centennial anniversary, and filled it with a great variety of interesting matter relating to the origin and early history of this, the oldest medical society in America, that has an unbroken career. The beginning of the number is adorned with a silhouette portrait of the first president of the society—Dr. Edward Augustus Holyoke, of Salem—and with a fac simile of the toast which he offered on the occasion of his 101st birthday.

A CURIOUS autopsy of a patient addicted to the immoderate use of tobacco revealed a condition of the lung tissues, presenting characters analogous to those of pipes which have been long in use.—*Jules Guerin*.

DR. H. KNAPP, of New York, recommends cotton pellets, moistened with glycerine and water (one to four) as artificial drum heads. They greatly improve the hearing, arrest profuse discharge and protect the deeper parts of the ear against injury from contact with the atmosphere.

TUMOR OF BLADDER.—The symptoms resemble very closely those of stone. The pain is more or less distinctive, being, in some cases, due to ulceration, in others, to efforts at expulsion. Hemorrhage is an early symptom, and once established is the most constantly present. Vesical irritation occurs later. In stone the reverse holds: irritation is early and almost constant; hemorrhage, as a rule, not copious and always intermittent. When stone produces copious bleeding, this proceeds from enlarged prostate. Exercise influences hemorrhage from stone more, perhaps, than from tumor; it produces much more pain in the former, causing it seldom in the latter. Sudden stoppage occurs in both, most frequently in calculus. In order to establish the diagnosis between the two, examine in every case with the finger and sound.—Berkeley Hill, *Brit. Med. Journ.*, May 14th.

DR. J. W. PATON reports a case of a child suffering with croup, into whose larynx he introduced a gum-elastic catheter, No. 12, and kept it in for about three days, when the child was able to breathe freely without it. The introduction was easy and simple.—*Brit. Med. Journ.*, May 21st.

AT the recent meeting of the German Congress of Surgeons, Thiersch described a phagedenic chancre which had started from the groin and traveled over the belly and thorax into the axilla before it could be checked.

A CASE of acute urticaria from a single three-grain dose of iodide of potash is reported in the *British Medical Journal*, May 21st. There were none of the usual symptoms of iodism present.

CELERINA.—Drs. Charles Zoller, of Litchfield, Ill., and N. S. Read, of Chandlersville, Ill., recommend this remedy very highly in cases of sexual exhaustion; the former also in the opium habit.

HOME AFFAIRS.

JOHNS HOPKINS UNIVERSITY.—The register just issued shows that during the last session there were 39 in the academic staff and 176 enrolled students. Of the latter 40 studied chemistry and 25 biology; 13 were graduates of medical schools; 7 are pursuing the course preliminary to the study of medicine, which includes Physics, Chemistry, Biology, with German, French, English, Psychology and Ethics. "The biological laboratory has a large suite of rooms occupying the entire upper story of the building, and including a general laboratory, several private work-rooms, a lecture-room and a cabinet. This also is well supplied with new and appropriate instruments." Notice is given that the *Journal of Physiology*, of which Dr. Michael Foster, of Cambridge, England, is the editor-in-chief, will in future be published in Baltimore, with the aid of this University. A very useful list of periodicals is given at the close, which includes those in the library of the Medical and Chirurgical Faculty, numbering over 100. The whole number of journals accessible to students in Baltimore (excluding ephemeral publications) is 676.

DR. JOHN MORRIS, of Baltimore, has written for the *Maryland Prisoners' Aid Association* a very useful little pamphlet designed to impress upon prisoners the importance and advantages of cleanliness, good habits and good morals.

WE learn that the B. & O. R. R. Relief Association has (no doubt in deference to the recent decided action of the Medical and Chirurgical Faculty) done away with the chief objectionable features of its constitution.

DR. WM. H. OSBORN, druggist, of this city, died June 16th, aged 46. He graduated at the University of Maryland in 1858.

MEDICAL SOCIETY IN HAGERSTOWN.

—The physicians of Washington County met June 14th, and resolved to form a medical association. A meeting will be held at Hagerstown, July 5th, for the purpose of effecting a permanent organization. We congratulate our professional brethren of that section on their zeal and good purpose; the power of *cooperation* in any class, and especially in one composed of intelligent and influential members, can hardly be overestimated. We hope the embryo society may be often heard from through our pages. We know of several physicians in or near Hagerstown who are capable of good society work, and would be a credit to any medical organization.

COLLEGE OF PHYSICIANS AND SURGEONS, BALTIMORE.—

The following changes are noted in the Faculty of this school from the Annual Catalogue recently issued: Richard Gundry, M. D., late Lecturer on Insanity, has been appointed Professor of Mental Diseases; J. H. Branham, M. D., Assistant Demonstrator of Anatomy; Wm. D. Booker, M. D., Demonstrator of Physiology. We are glad to see that a physiological and chemical laboratory has recently been established and placed in such competent hands as those of Dr. Booker. The catalogue contains the names of 335 students and 143 graduates. Six of the latter were three-year graded students.

DELEGATES TO INTERNATIONAL MEDICAL CONGRESS.—

Dr. L. E. Neale, of Baltimore, has been appointed an additional delegate from the Medical and Chirurgical Faculty of Maryland; of the other delegates, Prof. W. T. Howard will leave on the 6th, and Prof. Christopher Johnston on the 8th, of July. Dr. John Morris will be prevented from attending by professional duties. Dr. Jas. Carey Thomas is already in Europe.

DEATH OF DR. I. D. THOMSON.—

Dr. J. Davis Thomson died in this city on the 14th of June, aged 45. He was a native of Frederick County, Md., and a graduate of the University of Maryland, of the class of 1861. During the war he served in the Confederate Army. He was one of the surgeons of the Northern Central, Baltimore & Potomac, and Western Maryland Railroads, and also junior physician to Mt. Hope Insane Asylum. His death was due to chronic diarrhœa, probably tuberculous. He is represented by those who knew him best to have been a thoroughly upright and conscientious man, a skillful and painstaking surgeon, and strictly faithful to every duty of life. He contributed some interesting papers upon insanity and allied topics. The Medical and Chirurgical Faculty passed appropriate resolutions in regard to his death.

NEW BUILDING FOR INSANE PAUPERS.—A new building is being constructed at Bayview Asylum (Baltimore Almshouse) for the accommodation of the insane patients who are thrown upon the charity of the city. It will be capable of holding comfortably 350 patients, and will be fire-proof. There are at present 655 inmates in the Asylum, of whom 310 are insane.

ALUMNI PRIZE.—At the request of the Prize Committee of the Alumni Association, University of Maryland, we call the attention of the Alumni of that school to the Annual Prize of \$100, offered for the best thesis upon some medical subject. Those interested may learn all the particulars by addressing *Dr. B. Bernard Browne, No. 317 Madison Ave., Baltimore.*

PROF. ROBERTS BARTHOLOW has accepted an invitation to deliver the next annual address before the Alumni Association, of the University of Maryland, in March, 1882.

MEDICAL ITEMS.

THE dogs of war in South America continue to raise their Peruvian Bark. —*Ex.*—The charges for professional visits of young physicians in Massachusetts, at the middle of the last century, were about eleven cents each. —Dr. Edward A. Holyoke, first President of the Massachusetts Medical Society, lived to be 100 years, 7 months, and 8 days old. —Prof. Alfred Stillé has resigned his chair in the University of Pennsylvania. —The Massachusetts Medical Society has 1350 members. The average attendance at the annual meetings is about 750. —A Philadelphia quack tells the public: "If a patient wants it gentle and mild, I'm a homœopath; and when anybody wants thunder and lightning, I'm an allopath." —*Ex.*—A bill has been introduced in England for the total abolition of vivisection. —A Boston physician, who advised a dyspeptic to take plenty of exercise, was quite taken aback when the patient remarked that he was a mail carrier. —*Ex.*—Von Nussbaum, of Munich, has performed his 300th ovariectomy. —A "great composer"—chloroform. —*Ex.*—A professor, mentioning to a lady that he would lecture on the circulation of the blood, she said she had been troubled with that complaint for a long time. —The Richmond Medical College closed on the 16th ult. with nine graduates. —The suit brought against Dr. Sayre, of New York, for \$25,000, by a young woman, for alleged malpractice, was decided in his favor. —A writer, advocating the regulation of the practice in Massachusetts, in 1737, is severe on the "shoemakers, weavers and almanack-makers, with their virtuous consorts, who have laid aside the proper business of their lives to turn quacks." —An orchestra conductor, on being complimented on his youthful appearance, replied, "Oh! that was very natural, seeing that it was his business

to 'beat time.' " —*Ex.*—Hammond's recipe for ophthalmic goitre: *R.* Ferri pyrophosph, zinci bromidi, ãã ʒi ; tinct. digital., ʒv ; ext. ergot. fl; ʒiv . M. ft. mist. S. Teaspoonful three times a day. —The *Detroit Lancet* is in favor of holding the annual meetings of the American Medical Association in Washington; Dr. Gailard proposes Cincinnati. —The degree of Doctor of Letters was conferred, June 22nd, on Mr. G. Watson James, the accomplished editor of the *Richmond Standard*, by Washington and Lee University. —The first medical society in America was formed in Boston about 1735. —The following deaths are reported: Prof. Joseph Skoda, of Vienna, aged 75; Prof. Greenville Dowell, of Galveston, aged 58; Dr. H. Lennox Hodge, of Philadelphia, aged 44. —Dr. W. A. Dunkling, of Galveston, died on the 3rd (March, 1881):

Sick to death, but to quit, still unwilling;
At the end of his bleeding and pilling;
With no further chance of grave-filling,
Here resteth one Doctor—Done Killing.
—*Texas Paper.*

R. Sodii bromidi, ʒi ; ext. ergot. fl, ʒiv . M. Teaspoonful three times a day for active cerebral congestion. —*Hammond.* —The first account of vaccination given in this country was written by Dr. Benj. Waterhouse, of Cambridge, and appeared in the *Columbian Centinel* of March 16th, 1799. It is entitled "*Something Curious in the Medical Line.*" —It is rumored that a new weekly is to be started in New York, which is to make up for an alleged want of scientific excellence in the *Record*. —Prof. M. A. Pallen advocates closing a lacerated cervix at the time of the accident, just as we do for the perinæum. —Dr. Michael Foster's *Manual of Physiology* has been translated into German with a preface, by Prof. Kühne. —The published proceedings of the Massachusetts Medical Society comprise twelve volumes.

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MEDICINE AND SURGERY;

EDITORS:

THOMAS A. ASHBY, M. D., EUGENE F. CORDELL, M. D.

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VOL. VIII, No. 6.

ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

THE NATURE AND TREATMENT OF PNEUMONIA.

BY HORATIO R. BIGELOW, M. D.,
WASHINGTON, D. C.

Every enlightened student of medicine ought to be familiar with the bibliography of pneumonia. The disputed points of its pathology are also favorite themes of discussion in medical journals and medical societies. It were a vain presumption to attempt the history of either in a paper of this character. In the transitional stage of modern therapeutics, few are in a position to advance *ex cathedra* opinions; and these few are listened to, only in so far as the underlying support of their praxis, is a sound physiology. The mists of charlatanism that enveloped empirical medicine, that so befogged its professors, that they were unable to pronounce whether a given result was, in relation to a given dose *post hoc* or *propter hoc*, are being rolled away by the steady advance of physiological therapeutics. Clinical experience, reliable as an accessory, is never infalli-

ble, and is illegal, if the exceptions to a given rule are lost sight of. Know first the patho-anatomy of a disease; then adjudicate upon its treatment from what we learned of the action of drugs upon animals. This is scientific medicine. The other method, if relied upon exclusively, is the empty boastfulness of ignorance.

From the earliest epochs of historical medicine, the treatment of pneumonia has been more earnestly discussed than that of any other disease, and these discussions have not always been characterized by the courtesy and singleness of purpose, which pure science demands of its disciples. Experience teaches us that, as investigation proceeds, the received opinions of to-day form the superstitions of to-morrow; that future generations will decry our methods just as we look on and wonder at the practices of our forefathers. The soundest thinkers are the most modest, and we might well take for our shibboleth "*festina lente*." My purpose shall be, very briefly, *ex necessitate rei*, to provoke discussion of the merits of the various theories now used by

physicians in the treatment of pneumonia, so that for us, at least, the expression of a representative body may become a well defined opinion, based upon observation, experience and experimentation. Sydenham's statement, "*Hujus morbi curatio in repetita venæsectione fere tota est*," is the irritating thorn that has caused so much professional agony during the last decade. The learned monographs of learned professors upon the "heroic," the "rational" and the "expectant" plans, are libraries of themselves, the difficulty seeming to be one of exclusiveness. We are apt to forget that the abuse of any remedy does not contraindicate its discriminating use. Isolated systems are not applicable to every case. The exclusive use of one plan, ignoring individual idiosyncracies, and other plans of general acceptance, is pure bigotry.

First, then, as to the nature of the disease. *What is pneumonia?* In simplest language it may be defined as an inflammation of the vesicular structure of the lungs. What is the essential result of such inflammation? A clogging of the interior of the alveoli with the products of such inflammation, which are thereby rendered impervious to air. Its chief clinical feature is pyrexia. In primary acute cases the tendency is to a favorable termination by crisis, from the third to the tenth day. It may be caused by an alteration of the blood supply, by an extension of bronchial inflammation, by local disturbances, or by pulmonary obstruction, or mechanical injury to the lung. Apart from its minute pathology, there are three features of the disease worth considering—the dyspnoea and rapidity of breathing, the fever and prostration. The question of the treatment will depend very much upon our opinion of the causation of these symptoms.

Accelerated respiration and dyspnoea are, perhaps, the most marked phenomena of pneumonia. We have

now to deal with a lung in a condition of engorgement, for we may pass by the stage of arterial injection, which has been described by Stokes as a matter of which we know little or nothing. It is so rarely observed that Rokitansky and Skoda call in question its existence. Physiologically, and upon purely theoretical grounds, it seems only a necessary and antecedent state of the arteries that are soon to participate in a more active process. In this stage of engorgement there is intense congestion of the pulmonary vessels and commencing œdema of the lung. The capillaries of the pulmonary artery are loaded with blood, and the epithelial cells of the air vesicles are altered in structure. The respirations vary from 30 to 70 per minute. Why? It is the cry of the blood for aëration, is the general answer. But *is* this the only reason? From the very commencement of some cases of pneumonia the *nerve prostration* is the most formidable symptom of all, this prostration being caused by altered blood supply, and the effect which its high temperature has upon the nervous centres themselves. It is so frequently the case as to be almost universal, that pain and accelerated respiration will go hand in hand. Pain will also produce congestion and consequent pyrexia. In pneumonia the increased respiratory movement and the dyspnoea bear no relation to each other. The former often exists without the latter. The pain of pneumonia is a factor in the production of the increased number of respirations. The pyrexia itself is in part due to the same cause; and the two, accelerated respiration and pyrexia, may be at first, in part due to the pain, and to the altered condition of the nervous centres caused by the higher temperature of the blood, which temperature was caused by the pain. The neurotic theory of gout has been strongly advocated by Dr. Duckworth, in a late number of "Brain;" and while I do

not go so far as to class pneumonia among the neuroses, I cannot forget that its nervous phenomena (which are sometimes primary) have a very slight consideration in the question of treatment.

The condition of intense pulmonary congestion of itself is not sufficient to account for all the clinical symptoms. Were all the alveoli to become clogged at the same instant, then we could at once affirm that herein we had the secret of the dyspnœa. In most instances, however, there is no relation between the amount of aëration and the increase of respiration. But there is a relation between the altered blood supply, be it great or small, and the integrity of the nervous centres. We often have extreme dyspnœa with less rapid respiration. Can we attribute this to a want of blood aëration alone?

Is, then, this first stage of pneumonia, this condition of engorgement, primary, or is it a result of a want of harmony in action of the nervous centres? Shall we proceed at once to relieve the local congestion, or shall we address ourselves to the blood and nervous system? Shall we bleed, purge and blister, or shall we tranquilize (and thus reduce temperature through the nerve centres) and nourish? It is well known that the application of cold will reduce the temperature, will control the respiration and calm the nervous irritability. It is also proven that ice-bags to the spine will arrest certain phases of chronic dysentery, of nausea and of many forms of irritable fever. This acts directly upon the cutaneous circulation, and through it upon the general circulation as well, and indirectly upon the nervous centres, by relieving their congestion and lowering the temperature of the blood sent to them. In pneumonia, we have a local inflammation, with great and rapidly increasing prostration, and we have an altered blood supply. Before it is possible to detect any appreciable change in the lung sub-

stance proper, we have well marked rigors and a general sense of malaise, —prodromes of the local disorder. Shall we treat this prodromatic period upon the "expectant" plan, or shall we adopt the "heroic" practice? Shall we commence at the outset and treat these rigors as manifestations of nervous irritability, bearing in mind the sequences of pulmonary disorder that may ensue, or shall we administer a gentle placebo, and await the tide of results? Again. When the first stage has been well defined, shall we administer expectorants, or stimulants, or nourishing diet, or shall we first diminish pain and keep down temperature? In a certain sense, it may be said that the practice of medicine revolves in cycles; that customs, long since laid away, do, in course of time, obtain fresh favor. This is especially true of venesection. The practice of Sydenham, of Huxham and Cullen, of Gregory and Bouillaud, of Andral and Frank, is being revived, and with much feeling, by the modern practitioner. The objections to venesection are thus given by Dr. Wilson Fox:

1. That indiscriminate bleeding immensely increases the mortality of the disease.

2. That it is especially fatal in old people and in young children, in patients of exhausted constitution, and in those suffering from diseases, and particularly from Bright's disease.

3. That it is absolutely unnecessary in the majority of cases of young adults and also of young children.

4. That in the vast majority of cases it has no influence whatever either in cutting short the disease, or in lessening its duration, or diminishing the pyrexia, but that occasionally these results appear to follow from its use when practised early.

5. That in the majority of cases it hinders the critical fall of temperature and delays convalescence.

6. That in the majority of cases, as

shown by Dr. Bennett's and Dietl's data, recovery is equally, if not more, rapid, when it is not practised, as when it is resorted to.

7. That in a few cases moderate venesection may be necessary in the early stages to avert immediate danger of death by pyrexia.

And again (*Reynolds' System of Medicine*) he says:

"With regard to the possible effect of this treatment in cutting short the disease, it may be stated that the chances in any given case are strongly against such a result. Looking at the general effects of this procedure, patients will, on the whole, be probably in a worse condition for passing through the later stages of disease when weakened by an artificial loss of blood than they are likely to be if their resources in this respect are husbanded; and 'though its dangers are the least in the case of young adults of good constitution, who commonly "bear" bleeding comparatively well, this "tolerance" of the remedy by such subjects affords no proof of the general advantageous effects."

Upon this statement, Dr. Hartsorne, the American editor of *Reynolds' System of Medicine*, makes the following commentary:

"Tolerance, however, *plus* immediate relief of marked symptoms, and early recovery, affords the kind of evidence, which, according to all rules of clinical experience, is wanted to establish the appropriateness of a remedy in practice. While an individual case proves but little, yet the aggregate of individual cases, carefully observed, furnishes a better basis than any *a priori* reasoning can do, for conclusions in inductive medicine. What is claimed by those who still advocate moderate venesection in a certain minority of cases of acute pneumonia during the early stage, is, that having resorted to it, and seen it resorted to in a large number of such cases, relief and early recovery followed without

any drawback of excessive weakness. Their legitimate inference is that the unmitigated pulmonary inflammation would have produced greater debility than the timely withdrawal of a few ounces of blood. Nor does this conclusion, as a matter of fact, appear to be vitiated by the comparative effects of expectant or stimulant treatment, now so common, upon the mortality of the disease."

There are other physicians who go farther than Dr. Hartsorne, and advocate blood-letting in almost *every* case of acute pneumonia.

If the disease be once established, I fail to see of what use local blood-letting can be. It *will* not arrest the inflammation, though it may for a time palliate symptoms. It can have no influence upon the products of the inflammation, which are filling the alveoli, neither can it arrest the nitrogenous tissue waste. If one were fortunate enough to diagnose a case of acute pneumonia, during the prodromatic period, especially if the patient should happen to be a vigorous subject, venesection might, and certainly has, in many cases, averted the disease, and for this reason: By reducing the amount of blood, and lessening the heart's action, we relieve the tension of the nervous centres, we keep down temperature, we overcome tissue waste, and prevent the products of inflammation from being thrown out. Now, since the pain of pneumonia may be due to pressure upon nerves by these products, we also may arrest this symptom, itself one of the factors in the causation of more serious sequelæ. But in the stage of engorgement we have a more complex condition. We cannot afford to weaken the patient, already being rapidly prostrated from excessive tissue waste and nervous activity. We cannot afford to weaken the action of a heart already taxed to its fullest extent. The question is not now that there is too much blood sent to the lung, or there is

more blood than can be aërated, or that the inflammation is kept up by excessive congestion, but it is, will this venesection quiet pain, relieve nervous irritation, reduce the pyrexia, and hasten resolution?

Personally, I cannot speak from experience, but an analysis of a vast number of statistics, together with a knowledge of the effects of blood-letting upon the general economy, lead me to believe that the theory is illusive, and the practice faulty. However, the matter is now being so ably advocated, and the reported results of this procedure seem so seductive, that venesection may well claim the serious consideration of physicians. Pyrexia is due to a chemical change set up in the tissues themselves. It is a disorder of nutrition in which the "exchange of nitrogen exceeds the normal expenditure by nearly three-quarters, and in which there is likewise an excessive discharge of carbonic acid." This increase of blood-heat is, says Simon, "the essential fact of inflammatory fever. * * * * As the blood gets hotter and hotter, more and more do these symptoms become developed; as the blood subsequently gets cooler, so, more and more, do they decline."

I have, of late, with much satisfaction, employed the following plan in the treatment of these cases: The results have been favorable, and I should be unwilling to avail myself of the habit of venesection without an authoritative dictum from a majority of the profession. One is always loath to abandon any course of procedure, which has met with success, in order to indulge a love of investigation, in the adoption of another routine in which he has had no experience. When called to a case of pneumonia in its first stage, I quiet pain first. This I do by strapping, by chloral, or by applying to the denuded surface of a blister minimum quantities of morphia. I order milk and beef tea at regular and frequent intervals, but give no

stimulants. If the temperature be up, with a tendency to increase, I give quinine in *full* doses with veratrum viride. Should the pyrexia refuse to yield to this treatment within 24 hours, and the thermometer still continue to rise, I resort at once to the cold pack. I have yet to see any evil result from the proper and well regulated application of cold; on the contrary the effect is often wonderful. Nervous excitability is diminished, sleep is induced, dyspnœa palliated, cough subdued, pain relieved, and the temperature reduced surely and certainly. The effect upon the nervous system is singularly happy. The centres are relieved of their congestion and brought into harmonious action by the "cooling" of their blood supply, the cerebral irritation induced by this excessive nervous action is also quieted, and, as a natural result, sleep follows. The lung, relieved of a primary factor in the production of its inflammation, rests from its unnatural labor and the respirations become more and more natural. I repeat the application of the pack just as often as the thermometer indicates its use. Upon this and nourishing diet, together with the quieting of pain, I rely, almost exclusively, in the treatment of these cases.

ALCOHOLIC COMA.

BY J. H. BRANHAM, M. D.,

Assistant Demonstrator of Anatomy, College of Physicians and Surgeons, Baltimore.

(A Paper Read Before the Baltimore Medical and Surgical Society, May 25th, 1881).

The physiological effects of alcohol are identical with those of chloroform and ether, except that the different stages are longer. It will cause unconsciousness when inhaled, and its habitual use gives partial immunity to the other anaesthetics (H. C. Wood).

Its action on the system is divided into two stages; the first or stage of

excitement, and the second or stage of depression.

As I wish to devote this paper to the consideration of the coma which occurs in the second stage, we can pass over the first rapidly. In it, the functions are all exhilarated; the carotids beat forcibly and the amount of blood carried to the brain is increased. The thoughts flow more rapidly, and the mental capabilities are augmented. When a moderate amount of the alcohol has been taken, this stage lasts for some time, but when a large quantity is ingested, especially if the person is unaccustomed to its use, it is very transient and the stage of depression rapidly comes on. The extent and rapidity of its effects are also modified by the condition of the stomach, being less marked and coming on more slowly when that organ is full.

In the second stage, when a poisonous dose is taken, the vaso-motor nerves are paralysed; the pulse is slow, regular and compressible; the breathing is retarded and stertorous; the temperature falls rapidly; the pupils are contracted while perfect rest is maintained, but dilate as soon as this is interrupted, but they respond readily to light and are always regular. Tactile sensibility, and sensibility to pain, become obtunded, but rarely, if ever, are entirely lost. The cerebral functions are entirely, or almost, suspended.

When a lethal dose has been taken, these symptoms are intensified, and death begins with paralysis of respiration.

In twenty cases of alcoholic coma which I have seen during the past year, the fall of temperature varied from one to eight degrees Fahrenheit. The respirations in no case fell below eight per minute, and were never markedly irregular.

My attention, not having been called to the peculiar condition of the pupils noted above, they were in most

cases observed while the patients were disturbed, and are, therefore, recorded as dilated. Five of these cases are of special interest, and I will relate them in detail.

Mary K—, aged 48, vagrant. On the evening of December 1, 1880, the patient was arrested for drunkenness and taken to the station house. She was not unconscious at the time. After she had been in the cell about two hours she was found to be in an alarming condition and I was sent for. I found her unconscious, pulse sixty, respiration twelve, temperature 92 degrees Fahrenheit, pupils dilated and suffering from tonic spasms of the lower extremities.

There was a steam heater in the cell, its temperature being about 65 degrees Fahrenheit. She was carried to the City Hospital, wrapped in blankets, and cans of hot water applied. In two hours, the patient had recovered sufficiently to sit up, and next morning was able to leave the hospital.

The remarkable feature about this case is the tetanic spasms. I would offer, as a probable explanation of this, the physiological observation that a diminished supply of oxygen to the muscles produces these contractions, it being known that alcohol diminishes the amount of oxygen carried by the red blood corpuscles.

I relate the next two cases, because there is clearly another factor in the production of the depression of temperature, besides the alcohol; this is cold, which, as is well known, produces symptoms very similar to the former.

December 20, 1880, Timothy D—, aged 35, laborer, was brought to the City Hospital. He was found lying in the gutter, with the water, which was ice cold, running over him. He had the usual symptoms of alcoholic coma, his temperature being 93.2 degrees Fahrenheit. He also had tetanic spasms of the muscles of the legs.

January 1, 1881, John R—, laborer aged 27, was found in a half-nude condition, lying on the ice in the harbor. Temperature 94 degrees Fahrenheit. He recovered rapidly, but could not remember how he got on the ice, and said that he frequently drank as hard as on the previous day, without any bad effects.

December 17, 1880, David M—, aged 60, liquor dealer. I first saw the patient at the station house, at 8 P. M. He was lying in a semi-conscious condition, pulse 60, regular and full, respiration a little snoring. The temperature was not taken, but judging from the touch it was sub-normal. He could answer questions with some degree of intelligence. There was a wound on the head about one inch long; this was carefully examined, but no irregularity of the skull could be found. There was a clear history of excessive drinking, and also of a fall. His pupils were dilated, but equal and responded to light. There were no symptoms of paralysis. I gave directions to send for me if his symptoms became worse, and left the patient.

Was called again at 2 A. M., and found no change in his condition, except that the temperature was still more depressed. He was carried to the hospital, where he sank into a comatose condition, and died in about three hours.

The post-mortem examination showed a slight linear fracture involving only the inner table of the skull, which had opened one of the occipital sinuses; three or four ounces of firmly coagulated blood was found at this spot.

In this case there were no symptoms by which a correct diagnosis could have been made. I very much regret that his temperature was not taken, but this resulted from my not having a thermometer with me.

March 27, 1881, Thomas W., laundryman, age 30. The patient was

first seen at 2 A. M.; he was then in a state of complete coma. His feet could be tickled or pricked without producing the least movement. The conjunctiva could also be touched without result. Respiration was slow, but regular; pulse 80, and weak; temperature 94.8 degrees Fahrenheit; pupils widely dilated, and responding slowly to light.

History.—He had not eaten his supper on the previous evening. He left his place at 11 P. M. with a friend. They had several drinks of beer and three of whiskey. About half-past one A. M. he went into a restaurant to get supper, but had only been there a few minutes when he felt sick and dizzy, and had to leave. He had scarcely reached the pavement when he fell heavily. In the fall he received a cut over his left eye. Warmth was applied, and spts. ammon. aromat., gtt. xxx, every hour, was given.

8 A. M.—Still stupid, but could be roused, by speaking to him in a loud voice. In the evening he entirely recovered, and only complained of a feeling of heaviness about the head.

On account of the complete abolition of sensation, the fact that his pupils responded but feebly to light, the great length of time during which he remained unconscious, and the small amount of alcohol that he took, I diagnosed concussion of the brain as a complication.

In looking over the literature of the subject, I found that Prof. Macewen, of Glasgow, has written a paper, in which he states, that from careful observation of a large number of cases he has discovered that the pupils in alcoholic coma were contracted instead of dilated, as is usually stated. He also states that this condition only remained while the patient was at rest, dilatation coming on as soon as he was disturbed, and offered this as an explanation of the long continued mistaken observations with regard to this symptom.

I have made several experiments on dogs and cats to test this statement. I will relate some of these, as they show very clearly some of the more important symptoms of the disease which we are considering.

For the first experiment, a pup about a month old was used. His rectal temperature was 102.8 degrees Fahrenheit. Half an ounce of alcohol mixed with milk was given by the stomach. One hour after, his temperature had fallen three degrees. He lay motionless on the floor; his pulse was rapid and his pupils were minutely contracted, but dilated when he was roughly shaken. After remaining in this condition for several hours, he gradually recovered.

In the second experiment, a dog weighing about five pounds was used. Rectal temperature 100.8 degrees Fahrenheit. At 5 P. M., one ounce of whiskey was given by the stomach. At 5.26 P. M., he was partially comatose, temperature 98.8 degrees Fahrenheit. 5.35, whiskey repeated. At 6.35, complete coma, temperature 97.2 Fahrenheit, pupils contracted to a pin point, but dilating when he was forcibly shaken. Respiration nine, and pulse 160 per minute. He finally recovered.

In the third experiment, a pup, weighing one pound and a half, was used. Rectal temperature 101.4 degrees Fahrenheit. At 5.17 P. M., a half ounce of whiskey was given by the stomach. 5.48 this was repeated. At 5.55, the temperature was 99.5 degrees Fahrenheit. At 6.19, he was unconscious; pupils contracted, but dilating on disturbance, temperature 97 degrees Fahrenheit. 6.50, temperature 94.6 degrees Fahrenheit. At 7.25, temperature 92 degrees Fahrenheit, pupils dilated; respiration and pulse feeble. At 7.35, died.

Besides these experiments I have lately seen three cases of alcoholic coma, in all of which the pupils were contracted. So I think we may safely

say that this is the usual condition, when the patient is at rest.

Differential Diagnosis.—Every one who has been called on to diagnose a case picked up from the street, suffering from coma, in which he has no previous history to guide him, and but little time to decide, can thoroughly appreciate the importance of the differentiation of this condition. On this account, I have ventured to collect together the more important symptoms by which it can be distinguished from the other diseases that closely resemble it.

From Apoplexy.—Here the history is important, alcoholic coma coming on slowly after drinking, while apoplexy comes on suddenly after some severe exertion or excitement. In the latter, the pulse and respiration are generally irregular. The temperature may be one or two degrees below the normal (Charcot), but this is not so in most cases, and when it is, it only lasts for a few hours. The opposite condition is present in a vast majority of cases, the elevation being from two to five degrees. The pupils are irregular, one, as a rule, being contracted and fixed. In marked cases sensation and reflex action are entirely abolished, and, finally, the occurrence of one-sided convulsions or paralysis enables us to separate these cases from alcoholic coma.

Congestive apoplexy can always be differentiated by the elevation of temperature.

In compression of the brain, we have the history or signs of an injury; irregular respiration and heart action; dilatation, and, as a rule, want of symmetry of the pupils; convulsions often occur, and we can frequently detect unilateral paralysis. In all cases of compression or laceration of the brain that I have seen, except the one noted above, there has been marked elevation of temperature. Depression of temperature is not frequently present. Any one of these symptoms would exclude alcoholic coma. In concussion, the symptoms are very similar to those of alcoholic coma.

The pulse differs from that of the latter in being weak, rapid and often intermittent. The pupils and temperature are very similar in both conditions, and we are compelled to depend largely on the history in making our diagnosis.

The dropsy, with other symptoms of nephritis, the convulsions and presence of albumen in the urine, enable us to differentiate uræmia.

From opium poisoning, it may be distinguished by the presence in the former of minutely contracted and fixed pupils, and the great depression of respiration and circulation.

The symptoms are identical in poisoning from alcohol and chloral, so here we have only the history and the odor of the breath to depend on.

Treatment.—These cases should be treated as patients and not, as is too often the case, as criminals. Evacuation of the stomach and application of heat to the surface are all that is required in ordinary cases. In the more severe, hypodermic injection of ammonia, which is highly recommended in chloral poisoning, should be tried.

SANITARY TRACTS, COMPILED FROM MEMORANDA ON PRE- CAUTIONS AGAINST CON- TAGIOUS AND INFEC- TIOUS DISEASES.

BY C. W. CHANCELLOR, M. D.,
Secretary of the Maryland State Board of
Health.

NO. V.

BATHS AND BATHING.

For convenience, and to avoid periphrasis, we may use the following classification of baths:

1. The *tepid bath*—temperature 85° to 92° Fahr.
2. The *warm bath*—temperature 92° to 98° Fahr.
3. The *hot bath*—temperature 98° to 112° Fahr.
4. The *cool bath*—temperature 60° to 75° Fahr.
5. The *cold bath*—temperature from 60° downward to the freezing point.

Hot and cold water are also used locally, as in the hip-bath and foot-bath, and we occasionally meet with baths of a special

shape, in cases where local treatment is deemed necessary. It is unfortunate that every house is not provided with proper conveniences for the bathing; but, in the absence of the regular bath-tub, ordinary tubs of water may be used, or the surface of the body may be washed with a sponge dipped into water. Various plans have been devised for increasing the stimulating effect of water. It is sometimes a useful practice to add a certain quantity of salt to the water in which one is to bathe at home. The proper proportion is about one pound of common salt to five gallons of water. A solution is thus made which answers nearly all the purposes of seawater. Dr. Buchan considers it a better plan to rub the skin until it glows, with a coarse towel wrung out of salt water and rendered nearly, but not quite, dry, by exposure to the rays of the sun or to warm air. Struve is of opinion that in summer, river water is preferable to any other; but if this cannot be had, spring or pump water should be suffered to stand all day exposed to the sun, "that it may acquire a more animating quality by the caloric and oxygen which it thus imbibes." To this may be added, when used by the aged or delicate, a small quantity of warm water.

The constant change of the stratum of water in contact with the body vastly increases the power of the bath in influencing the temperature and stimulating the skin. One method of attaining this object is by keeping the water constantly in motion, as is done in the so-called *wave bath*, common in some parts of Europe. In the Roman baths there were two kinds of bathing tubs; one fixed and the other movable. Of the latter, some were contrived on purpose to be suspended in the air, by means of which, to the good effects of agitating the water, was added the pleasure of being rocked in the bathing tub. But the best of all baths is the *swimming bath*, for in it the bather can indulge in a free exercise of his limbs, such as is hardly attainable under any other circumstances. Swimming is a very valuable exercise, because it employs the arms equally with the legs, and leads to a healthy development of the muscles of the chest. Swimming also has its

advantages from the water being in continual motion.

It has been said, with regard to the use of baths, that *cold stimulates, but heat facilitates function*. "Between the two therapeutic opposites," says Braun, "a similar relation exists, as between winter and summer life, and between sea and mountain air. The physician who has, to a certain extent, acquired an insight into the diseased side of mankind, divides the chronically sick into two groups, the one consisting of individuals whose organism has sufficient capital to afford the strong reaction required, the other consisting of persons needing nice management, and whose own power cannot be exposed to any great demand. For the one, there is the system of exercise, cold treatment, cold baths, sea baths, and sea air; for the second, indulgence, warm treatment, warm climate, warm baths, mountain air."

The point of chief importance in a bath is the temperature. Very strong and healthy persons may permit themselves considerable latitude in this respect, and some diseases may require a higher temperature than others, yet for common and dietetic uses the greatest benefit is derived from baths, a little below the standard heat of the body, that is to say about 90° or 95° F. When they exceed this, they may prove too stimulating. It is at a temperature of from 90° to 95°, that the soothing and refreshing effects of the warm bath are chiefly to be expected; and at this degree of heat, it may in general be used with safety and advantage

GENERAL RULES FOR BATHING

It is never advisable to bathe directly before or directly after a meal, since bathing invariably affects the distribution of the blood, causing, as the case may be, either a degree of bloodlessness in internal organs, or if the bath be cold, an undue congestion of them, and in either case a want of digestion of the material in the stomach is likely to result. An hour or two before breakfast or dinner, when the stomach is empty, is the most proper time to use the bath for ordinary purposes. The time for remaining in the bath should be in gen-

eral about half an hour, and should never be so long as to produce languor at the time or afterwards. The bather, if strong and healthy, may rub himself moderately with his hands or a flesh brush, during his continuance in the bath; but, as bathing, in all its forms, necessarily makes a call upon the vital forces and causes a certain amount of exhaustion, much exercise should not be indulged in either during or after a bath, until a considerable period of time has elapsed. Hippocrates, the father of medicine, writing some four centuries before the Christian era, says: "The person who takes the bath should be orderly and reserved in his manner, should do nothing for himself, but others should pour the water upon him and rub him."

On coming out of the bath, the body must be wiped perfectly dry previously to the usual dress being resumed. The proper ventilation of the bath room is a matter of prime importance, for since the respiration is quickened by the act of bathing, it is evident that a foul atmosphere in the bath room is very liable to produce an ill effect upon the bather. It is a very common custom in private houses to place the bath and the water closet in the same apartment. That this is an undesirable arrangement is evident, for the water closet is, of all places in a house, that in which a foul atmosphere is most likely to be encountered. Although a bath room should be well ventilated, it should be free from currents of air blowing upon the moist skin of the bather, which are likely to give "cold."

VARIETIES OF BATHS

Mineral Baths are baths composed of water in which a considerable quantity of mineral matter has been dissolved, either by natural or artificial process. It must be remembered that ordinary water is very far from pure, and that even rain water, the purest of all natural waters, contains a considerable number of saline ingredients dissolved in it. Spring water or river water is very largely impregnated with matter which it has dissolved,

But the mineral baths at most of the watering places in this country and Europe, being impregnated with saline, sulphurous and chalybeate substances, are considered by many to be more powerful in curing diseases than the artificial, which never can be so thoroughly combined with these substances. Some of these baths are so extremely powerful, however, that they ought to be resorted to with care, and should by no means be lightly taken. The natural hot and warm baths in this country, except the celebrated hot springs in Arkansas, are not supposed to possess any peculiar curative or restorative virtues. The difference between them and the hot or warm baths, which any one may enjoy at home is not material. Indeed, unless one disregard the expense and find pleasure in a new scene, they may prepare their own warm baths at home, which will answer the purpose as well, as most of the natural warm baths to be found in this country. They usually contain little or no mineral properties, and it is, perhaps, better to regard them as simply hot water baths, the chief and only virtue of which is in the warmth of the water.

RULES FOR INVALIDS AT MINERAL BATHS.

An invalid or a very old or delicate person arriving at the springs, after a wearying journey, or one which has in any way disturbed the ordinary functions of the organs, should devote one or more days to repose. This time may be utilized in establishing himself comfortably in his new quarters, and in making out a plan with his physician for the use of the water. Unhappily, too many disregard this rule. Scarcely arrived, they will immediately commence to drink the water and to bathe in it, hoping, and too often expecting, to be relieved from their complaint immediately. So near the goal, they will not wait longer before undertaking the cure; whereas, repose of body and mind are the first conditions necessary to the attainment of the wished-for result—health. Before using mineral water, either outwardly or inwardly, the body should be in the most perfect equipoise possible;

it should especially not be heated through walking or riding; the stomach should not be too full, and the use of spirituous liquors is unadvisable, except after a bath when reaction is tardy.

The invalid bather must remain quiet in the bath; he should not heat his blood and increase the pulsation of the heart by unnecessary movements. He is not only to observe a passive demeanor in the bath, but the same is to be maintained after the bath. Patients should wrap up securely and retire to their rooms and bed immediately after bathing, and should cover themselves moderately, but carefully in the bed, in order to preserve the temperature of the skin against disturbance from the outer air; they should pass from half an hour to one hour in this manner of rest, after which the skin should be well rubbed with a dry, rough towel, or flesh brush, and warm clothing be put on. After this, moderate exercise may be taken in the open air.

The temperature of by far the greatest number of *prescribed* baths will vary from 90° to 98°. Although the difference is small, the effects caused by it are notable, and one cannot be warned too strongly against considering such differences as of no account whatever. Only in rare cases is it considered necessary to prescribe baths of a higher temperature than 98°; somewhat oftener they are advised under 90°. The water should be well stirred, as the upper layer of a recently filled bath is often warmer than the under.

The length of a bath should, as a rule, vary between fifteen and thirty minutes. In some cases, for example, in immoderate susceptibility, weakness or inclination to fainting, it must be still more decreased. On the other hand it is sometimes necessary to increase the length of time in the bath to forty-five or fifty minutes, which is to be taken as the extreme limit.

The arrangements for bathing at the various mineral springs scattered about Europe are much better carried out, especially upon the continent, than in this country. In any course of treatment, bathing is generally one element of the regimen to which one is directed to submit. Diet, climate, rest, exercise and

the internal administration of medicine or of mineral water, are often called into requisition to perform their share in the cure; and while a patient is bathing, and by bathing is stimulating his animal functions, it is of the greatest importance that he should live the healthiest life imaginable. At most of the German baths a strict surveillance of the bathers is maintained. At those which have the greatest reputation, it is almost impossible to get, in the shape of food, anything of which the local physicians would disapprove. The foreigner submits in all things to authority, and while "undergoing a cure" he is content to have his time of rising and going to bed, his meals, his exercise, his baths, and other treatment, all accurately regulated for him.*

It is on this account, no doubt, that the German and French baths have so great a reputation, for, while visiting them, the guests live by rule, just as athletes do, when they wish to bring themselves to the highest pitch of health attainable in view of some muscular contest.

The advantages of mineral baths over sea baths also lies very greatly in the fact that we are not only able to choose our water and its temperature, but our climate; to have either a mountain climate with a low barometric pressure, or a sea level climate with a high barometric pressure, or a climate where the barometric pressure is intermediate between the two.

SOCIETY REPORTS.

PROCEEDINGS OF THE MEDICAL SOCIETY OF HARFORD COUNTY, MARYLAND.

REPORTED BY THE SECRETARY, W.
STUMP FORWOOD, M. D., OF
DARLINGTON, MD.

The regular meeting of the *Medical Society of Harford County* was held in the parlor of Granger's Hotel, Bel Air, on May 10, 1881.

*Health Primers, London, 1879.

In the absence of the President, Dr. Whiteford, and of the Vice-President, Dr. Wyson, Dr. W. W. Virdin was unanimously chosen President pro tem.

The minutes of the previous meeting were read by the Secretary, and, no objection being made, they stood adopted.

The committee on joint meetings with the *Medical Society of Cecil County* reported through Dr. Forwood, that Dr. R. H. Smith and himself had conferred with a similar committee from the Cecil Society, and had agreed upon holding a joint meeting at Havre de Grace on the second Tuesday in June next. They were unable to arrange for meetings beyond that date until the amendment now pending to the constitution of the Harford Society, for increasing the frequency of its meetings, shall have been acted upon. The committees will take further action, with regard to the future joint meetings, on the second Tuesday in June.

Dr. W. Stump Forwood, one of the delegates to the meeting of the *Medical and Chirurgical Faculty of Maryland*, April 12, 1881, delivered the following report:

Mr. President and Gentlemen:

We respectfully submit the following report of our delegateship to the State Medical Society, which met in the city of Baltimore, in its eighty-third session, on the 12th of April, 1881. We were present at the opening of the first day's session, and remained until the fourth day, not missing any part of the proceedings during that time—three days. Not anticipating, upon leaving home, that the *Faculty* would continue its session a longer period, our arrangements for home duties then compelled our return; and, although the meeting did not finally close until the fifth day, yet it is believed that the most interesting and important part of the proceedings were transacted within the first three days.

The sessions were held in the hall of the Johns Hopkins University, and at the opening, the *Faculty* was called to order, at the hour of noon, by the President, Dr. H. P. C. Wilson, with Drs. W. G. Regester and E. F. Cordell as Secretaries, and Dr. Judson Gilman, Treasurer.

The proceedings were opened with prayer by Rev. W. U. Murkland.

A very large attendance of members, and a respectable number of delegates, were present at the meeting—a larger number, we were informed, than at any previous meeting since 1839.

Your society, in addition to your present reporter, was represented by Dr. H. Clay Whiteford, who remained one day in attendance.

Dr. J. H. Jamar was present as a delegate from the *Cecil County Medical Society*.

The opening address of the President, Dr. H. P. C. Wilson, was interesting, instructive and suggestive, and was received by his auditors with marked attention. His first sentence was: "Born in Maryland, reared in Virginia, and educated at Princeton, thirty years ago I started the practice of medicine in Baltimore, having only an old mahogany desk, a few medical text-books, and one hundred dollars in money."

His trials and discouragements were many, but through unflinching perseverance, and being sustained by a strong will and indomitable courage, he finally overcame all obstacles, and stands to-day elevated, by his fellow-physicians, to the high and honorable position of presiding officer over this ancient and illustrious *Faculty*; an office that had been filled by many of the great and the good physicians of Maryland; an office that any man, however distinguished in the profession, might feel honored in occupying.

He referred to the "ups and downs" that had marked the career of the *Faculty*, ever since his connection with it. On some occasions the meetings had been so small that it became necessary for the officers to re-elect themselves in order to keep up the organization. The present meeting was the largest that had ever been held within his recollection.

He expressed a fervid wish that the *counties* would take more active interest than formerly, and would be more largely represented at the future meetings. With the view of securing practical results from these suggestions, the President submitted, at the close of his address, the following recommendations, which were presented at the subsequent

session in the form of resolutions, and unanimously approved: "First, that two weeks before each annual meeting of the Faculty, an advertisement, announcing the date, place and time, of each meeting, be inserted in a newspaper of each city or town in every county in the State;" and, secondly, "that at each annual meeting a committee of five members be appointed as a *reception committee*, to provide for the comforts of those coming as delegates to the meeting from other parts of the State."

The president earnestly advocated the organization of medical societies in every county in the state, and suggested that the secretaries of the county societies prepare annually an abstract of the proceedings of their several meetings during the year, embodying such parts of their transactions as may possess a general interest in their report, to be presented by delegates to the State Faculty.

We may add, that in addition to these public remarks in reference to enlisting the interest of the country physicians, the president expressed himself upon these points more freely in private. Both of your delegates were very kindly and very pressing invited by the president to a select entertainment at his residence on the evening after the first day's session; the entertainment being given, as he assured us, especially in honor of his country brethren, all of whom, then present, he wished to attend. We attended this reception and were very heartily received—generous Southern hospitality being made manifest.

We were most warmly welcomed; enjoyed most pleasant intercourse with the few country physicians who were present at the meeting on the first day, and a few city members of the Faculty, who were invited to aid the host in doing the honors; and finally partook, with much enjoyment, of a sumptuous evening repast.

We are fully convinced that if the country physicians generally could have been present on this occasion with President Wilson and his friends, warm feelings of friendship and respect would there have been cemented in a manner which must have proved a most practical illustration of how the remarks in his address, with regard to closer unity

with country practitioners, should be exemplified.

With our observations and experience at this meeting, where we made acquaintance with a considerable number of city physicians, we can cordially commend President Wilson's suggestions in regard to county societies. It is evidently our duty, aside from these kind invitations, to do all in our power toward sustaining and promoting the interests of our ancient and honorable State *Faculty*. The President stated in his public remarks that there had never resided in Baltimore, since the organization of the Faculty, any respectable physician, who had ever succeeded to a high position in the profession, who was not a member of the *Medical and Chirurgical Faculty*.

After the delivery of the President's address, which was received with manifestations of approval, the Corresponding Secretary, Dr. J. Edwin Michael, and the Treasurer, Dr. Judson Gilman, read their respective reports, which were approved and recorded. Twenty-seven new members were proposed and successfully balloted for—the largest accession to the Faculty at any one meeting within the last fifty years.

Various committees reported; and the *Section on Surgery* made a highly interesting report through its Chairman, Dr. Oscar J. Coskery; and the *Section on Materia Medica* reported through Dr. A. Atkinson, at the conclusion of which, and of the discussions that followed, the Faculty adjourned to meet at 12 o'clock on the following day.

The second day's session was opened by the President, in pursuance of adjournment; and, immediately after the reading of the minutes of the previous day's, session a highly interesting lecture was delivered before the Faculty by Prof. H. Newell Martin, of the biological department of the Johns Hopkins University, at the request of the Executive Committee, entitled: "*On a Method of Isolating a Mammalian Heart.*" Prof. Martin illustrated his lecture with diagrams, and explained the very difficult and ingenious methods resorted to, to effect the complete isolation, while maintaining the heart's action—a physiological feat which he believed had not been previously attained in the case of a *mammal*.

This lecture of Prof. Martin's was immediately followed by one equally interesting and instructive, by Mr. W. T. Sedgwick, also of the Johns Hopkins University, upon a somewhat similar subject, viz: "*The Study of Blood Pressure in the Coronary Arteries of the Heart.*"

Through a series of experiments and observations most carefully and perseveringly conducted, Mr. Sedgwick has been successful in determining, with absolute certainty, a point in connection with the Blood Pressure in the Coronary Arteries that has hitherto baffled the efforts of some of the ablest physiologists, in various parts of the world, for more than half a century. Indeed Mr. Sedgwick's observations have disproved the usually accepted theory on the subject. We will state for the information of those interested in these physiological researches that, it was announced that both of these valuable papers would be published in full, in the *Journal of Physiology*, published at Cambridge, England, and which is now published, conjointly by the *Johns Hopkins University*. Therefore we attempt no synopsis.

The people of Maryland,—we might say the people of the United States,—may well be proud of the Johns Hopkins University. It has the means of commanding the very best talent from all parts of the world as instructors; and every experiment of the slightest value to its pupils or to science is exhibited in the most pains-taking manner, and by the aid of every available and imaginable appliance and instrument that money can purchase. We are informed that whatever is needed for the better instruction of the students, is immediately procured and made subservient, even should its uses be limited to a single occasion, and its cost rate high in dollars and cents. This possession of an ample fund gives this great University, which in time, if not at present, will rate equally with Oxford and Cambridge, facilities for education in the higher departments of learning unequaled by any similar institution in the United States, or in the world. Time only will now be required to establish and extend its fame and usefulness.

The next business for this day's session was the balloting for the long list of candidates for membership, before referred to; after which Dr. Richard McSherry read a valuable paper as the report of the section on the *Practice of Medicine*. Consumption, syphilis, and malarial diseases were especially considered, and some remarkable cases were related.

Dr. John S. Lynch also read a very interesting report from the same section, it being supplementary to that of Dr. McSherry. The reports elicited much valuable discussion from several of the members present. These discussions are really, in many instances, quite as valuable as the papers that suggest them, and several of the members very earnestly insisted that the Secretary should keep a minute of such remarks for publication with the papers in the annual volume of *Transactions*; and, if we remember aright, a motion to that effect was adopted.

Next in succession, Dr. A. F. Erich read the report from the section on *Obstetrics and Gynecology*, which was marked with many points of interest to the practitioner. Prof. Wm. T. Howard made interesting remarks in connection with this paper.

We observed Dr. J. M. Toner, of Washington City, an ex-President of the *American Medical Association*, on the platform to-day. Dr Toner has always manifested a deep interest in the success of medical societies.

The great event of the session of the third day was the delivery of the annual address, by Prof. Wm. Goodell, of the University of Pennsylvania. The title of the address, which was by no means suggestive of its character, was "*The Dangers and the Duty of the Hour*." This paper was published in full, on the following morning in the *Baltimore American*; and doubtless some of you have read it. It referred, chiefly, to the physical degeneration of American women, caused, in the first place, by the baneful boarding-school training, where the mental faculties are unnaturally stimulated at the expense of the physical functions; and, when finally these "over-educated" girls shall have "graduated," under the great pressure and excitement

incident to the preparation for the "commencement," and shall have entered "society," some unwary youth, attracted by their butterfly beauty and over-acted "style," is captivated by the ready wit, surface charms and brilliant conversation, and marries one, and learns, too late, that he has taken with her a legacy of "headaches, spineaches, backaches, and general ill-health." Dr. Goodell regards such marriages in the light of frauds practiced upon unsuspecting men. Another, and as the Doctor says, a very frequent cause of the ill-health of the married women in this country, is the general repugnance to bearing children, and thus having their pleasures in society interfered with by the restraints and deprivations necessarily incident to the rearing of a family; and the consequent injury resulting to their health from the measures adopted in contravention of Nature in the prevention of conception; and in the production of abortion when conception occurs. This unnatural and sinful practice, the Doctor affirms, has its votaries among high-bred and Christian people, even in the families of the ministers of the Gospel. The practice of thus limiting offspring, not only results disastrously for the multiplication of the human race, but reacts ruinously upon the health and happiness of the women who commit such fraud upon the human family.

The address of Dr. Goodell will be published in the annual volume of the *Transactions of the Faculty*.

In the opinion of your reporter, the propriety of the public discussion of such a subject—limiting offspring—and its publication in the secular journals (*vide Baltimore American*, April 15), may be very seriously questioned. The subject of artificially limiting the production of the human family, so to speak, emanating from such high authority, will naturally attract unusual attention on the part of the laity. Some are already cognizant of the existence of such facts, and practically exercise their knowledge, while others are yet ignorant of such measures. But this public discussion, by leading professional authority, will arrest the attention of the multitude, and will most likely suggest the investigation and practice of the previously

shrouded mystery; while, probably, the actual good accomplished will be *nil*.

"Vice is a monster of so frightful mien,
As, to be hated, needs but to be seen;
Yet seen too oft, familiar with her face,
We first endure, then pity, then embrace."

These well-known lines of the great poet and philosopher perhaps never had a more appropriate application than to the subject of Dr. Goodell's *address*.

The vice so solemnly condemned by the speaker, is undoubtedly one of those evils, inherent to the human mind, familiarity with which is most likely to end in its being "embraced."

We have no confidence whatever in the *moral effects* resulting, that forms the basis of Dr. Goodell's remarks; therefore, we regret to feel compelled to conclude, as we do, that the *discussion* of the subject will, in itself, develop a tendency to increase the very evil which the Doctor so warmly deprecates.

Dr. Uhler, of Baltimore, exhibited one of his patients to the Association, at this session, who was suffering from stricture of the œsophagus. The case was that of a man apparently 65 years of age. We did not understand the cause to which the stricture owed its origin or the length of time that it had existed. It had now become necessary to use the rubber tube for the introduction of food into the stomach. The Doctor gave his patient his mid-day meal in the presence of the *Faculty*, which consisted, on this occasion, of milk alone. Four or five pints of this fluid were pumped into the stomach by means of the Davidson syringe. A very brief period of time was occupied in the injection—about five minutes. Sometimes, we were informed, rich soups were used as a substitute for milk; and to these, finely powdered cracker and other substances, were, at times, added. Previously to the use of the stomach pump, the patient, we were told, had become very much emaciated from starvation. Though by no means robust, he now presented the appearance of a tolerably well nourished man.

The result to be dreaded is, of course, the final closure of the stricture to such an extent as to forbid the use of the tube. The necessarily frequent introduction of the tube—twice daily—with its irritating

effects, must hasten this result. Should the patient unhappily reach such a termination, we would consider *gastrotomy* and the maintenance of a permanent opening into the stomach, through the walls of the abdomen, for the reception of food, a legitimate and justifiable operation for the prolongation of the patient's life. We hope that Dr. Uhler will report the future progress and result of this case.

Dr. James A. Steuart, Health Commissioner of Baltimore City, read a valuable report on "*Sanitary Science*," at the conclusion of which Dr. J. Carey Thomas, Dr. William T. Howard and others, made remarks appropriate to the subject.

The unpleasant odor and taste of the hydrant water in Baltimore is occupying a large share of the attention of physicians, and of the people in that city at the present time. Dr. Steuart was not yet prepared to account positively for the origin of these impurities; but he was satisfied that they were not specially noxious to health, and could readily be removed by filtration. Further investigations were being pursued.

As remarked at the beginning, we were not able to remain until the final adjournment of the Faculty; and, therefore, do not offer any portion of the proceedings that occurred subsequent to our departure.

We were much instructed by many interesting discussions that took place upon the various subjects presented during the first three days; but our present report would far exceed its proper limits were we to attempt to reproduce them here.

This meeting of the Faculty, as has already been stated, was the largest, the most interesting, and, we may add, the most enthusiastic, as the older members have informed us, that has taken place within the memory of any of those present. We trust that the *Medical Society of Harford County* will, in the future, send full delegations to the annual meetings of our State Faculty, to the end that the objects of both shall be the better subserved.

Feeling desirous of obtaining all the professional information possible, during our visit to the city, we will add, as a

supplementary report to the chief object that led us to the city, that on the evening of April 13, we accepted the invitation of our friend and host, Dr. T. A. Ashby, to visit the regular meeting of the Baltimore *Medical and Surgical Society*. Here we met, in a pleasantly social way, several of the physicians to whom we had been introduced at the meetings of the Faculty, and were made acquainted with some whom we had not had the pleasure of seeing before.

Your reporter was made to feel quite "at home" in this meeting, not only through the extreme cordiality evinced toward him by the members generally, but especially in the meeting with natives of Harford County, viz.: Dr. Scarff, the President of the Society, and Dr. A. Trego Shertzer, both of whom have been for some years past, well-known practitioners in Baltimore.

Immediately after the President called the society to order, a member arose, and called the attention of the Chair to the fact that your delegate, "an ex-President of the Medical Society of Harford County," was present, and he moved that he be invited to participate in the proceedings of the meeting. The motion was seconded, and unanimously adopted, when the President expressed his approval in a few very kind and complimentary remarks.

The chief event of the meeting was the reading of a paper by Dr. T. A. Ashby, entitled "*The Management of the Perineum During Labor*." This paper, which was one of unusual interest, presented the views of the latest and best authorities on the subject, and was received with marked attention by the Society. The leading object of the paper was to elucidate the duty of the accoucheur in so supporting the perineum as to prevent the accident of rupture. The discussion which followed the presentation of the paper was earnest and animated, and was participated in by Dr. John Morris, Dr. A. F. Erich, Dr. J. S. Lynch, Dr. Opie, and others. The views of the various speakers upon the comparative frequency or infrequency of the accident constituted the major part of the discussion. Dr. Erich regards the rupture of the perineum as an accident of rather frequent occurrence.

He did not wish to be understood as saying that the complete—vagina-rectal vulvo-anal rupture was of considerable frequency, but that a slight rupture of the fourchette did, in his experience, often result from a very rapidly completed labor, especially in primiparæ. And, in his view, in all such cases, however slight, the rupture should be treated immediately, either by the use of a stitch or two, or by keeping the thighs approximated, and by the adoption of measures for preventing the secretions from irritating the wound and interfering with union.

On the other hand, Dr. Morris was convinced that the rupture of the perineum was an extremely rare accident, if the labor was properly managed by the practitioner; and most frequently resulted in cases where the forceps were unskillfully used. He denounced "meddlesome midwifery" with all the ardor that characterized the teachings, as we remember, of those eminent instructors of the last generation—Hugh L. Hodge and Charles D. Meigs. He said that in an obstetrical practice, aggregating over two thousand cases, he had not met with this accident more than half a dozen times. We are not positive, but think this is the number of the accidents stated. Dr. Morris insisted that in the state of nature such accidents almost never occur, especially with the lower animals, where no aid whatever is rendered. In the heat of his remarks he appealed to your reporter, as having enjoyed opportunities of observation in the country, if he had ever seen such an accident in the lower animals. He replied that he had not; but upon subsequent reflection he remembers seeing, some years ago, a vagino-rectal fistula in a mare, in which case a portion of the fæces, at each defecation, passed from the vulva. Of the history of the accident, however, except that it occurred in labor, he was not informed, but may safely say that it did not result from "instrumental interference."

The discussion between the various members who took part, was highly interesting, and, at times, quite exciting, Dr. Erich and Dr. Morris appearing as the leaders of the respective sides representing the frequency, and the infre-

quency of the malady, and of the measures for its prevention, and, when not prevented, its treatment. Your reporter has met with but one or two cases of such rupture, and they so slight as not to require sutures, in a practice extending over a quarter of a century. Therefore, having no personal experience to give, he did not participate in the discussion.

Through the courtesy of Dr. J. J. Chisolm, we had the opportunity of witnessing, at his office, his treatment of various forms of eye diseases. It is surprising to us country physicians, who usually occupy half an hour or more in prescribing for a single patient, to observe with what dispatch Dr. Chisolm disposes of the numerous sufferers who daily throng his waiting-room. He readily gives all the attention necessary, makes the essential inquiries, applies his treatment, or writes a prescription, and sees his grateful patient to the door, within five or ten minutes after entrance in his office. During his morning hour we were so fortunate as to see the Doctor operate for the removal of cataract, upon a gentleman from the West, who was apparently about 50 years of age. The Doctor uses chloroform, when there is no contraindication, and with remarkable immunity from accidents. In this case the anæsthetic was administered by an assistant; the cataract was very carefully and thoroughly removed, the patient's consciousness partly recovered, his eyes bandaged, and he prepared to be placed in bed in less time than thirty minutes.

As you all know, Dr. Chisolm stands in the very front rank among the best American surgeons in his special department—eye and ear diseases; and Maryland, his adopted State, may well be proud of his skill and attainments, as well as of the Johns Hopkins University, previously mentioned as a Maryland institution.

We have only to add, in conclusion, Mr. President, that the *Medical Society of Harford County* appeared well known to the majority of physicians that we became acquainted with, was spoken of with great respect on all sides, and was especially complimented in the kind and courteous treatment that was uniformly extended to your delegate and reporter.

AMENDMENT TO THE CONSTITUTION.

The following amendment to the Constitution, previously offered by Dr. Virdin, was next adopted, viz.: "The meetings of this Society shall be held on the second Tuesday of each alternate month," beginning with the date of the meeting adopting the amendment.

NEW MEMBERS.

Dr. Lee proposed *Dr. James T. H. Gorsuch* for membership, and Drs. Lee and Riley proposed *Dr. Frank P. Smithson* also for membership, both of whom, upon being balloted for, were unanimously elected. Dr. Gorsuch was present and was invited to participate in the proceedings of the meeting.

DIPHTHERIA.

Dr. J. Ward Scott, the essayist for the day, read a highly interesting paper upon the subject of *Diphtheria*.

He believed diphtheria to be a distinct disease, of a constitutional character, contagious in its nature, and very depressing in its action upon the vital forces.

He gave a sketch of its early history; and, in its treatment, he decidedly favored the use of tinct. ferri chlor., potass. chloras, quinia, and stimulation.

At the conclusion of the reading of Dr. Scott's paper, Dr. W. W. Virdin also read some striking remarks upon the same subject, which elicited considerable discussion. He afterward stated to the Secretary, however, that he did not wish them to appear on the minutes or in print.

Considerable discussion followed the reading of these papers upon the subject of diphtheria.

Dr. Gorsuch stated that he was a comparatively young practitioner, and had not seen a great number of cases of this disease; but, from those that he had met with, and from the teachings received from his medical instructors, while a student, he was induced to believe that diphtheria was an asthenic, constitutional malady, with local manifestations; that it was contagious in character, and ran a certain uniform course—more or less modified by treatment and hygienic surroundings. In the treatment, he relied chiefly upon quinia, iron and chlorate of

potassa, with beef tea, concentrated soups, milk, &c., as articles of diet. The majority of those present appeared to concur in these views.

Dr. Forwood remarked that when diphtheria first invaded this country, within the knowledge of the present generation, it had been his fortune to treat a number of cases. The first cases that occurred in Harford County came in the form of a violent epidemic in the autumn of 1862. He had previously been prepared for recognizing and treating this malady from reading a great number of practical articles that had appeared in the *London Lancet* and in the *Edinburg Medical and Surgical Journal*, the epidemic having ravaged Great Britain before its appearance in this country. The epidemic appeared as a new disease, on Deer Creek, in this county, and showed itself in several neighboring families simultaneously in the year mentioned—1862. We were fortunate in being able to recognize it on sight, and in applying tonic and supporting treatment from the beginning. We lost several patients, who were fatally poisoned by the disease at the very commencement, but the majority recovered. Dr. Forwood stated, that, at the request of this Society, he had prepared and read an elaborate paper on the subject of diphtheria before it at its meeting on November 12th, 1867.

There has been no general epidemic of the disease in this country since 1862. Sporadic cases do occur every two or three years, but rarely have extended beyond the family in which it originated. Since his remarks before the Society regarding this affection, he has no reason to change any of the views then expressed.

He considers the disease essentially distinct from all forms of croup, and from all other diseases; it is adynamic in its character, and requires supporting treatment from its inception. He invariably uses the tincture of the chloride of iron, mixed with a saturated solution of chlorate of potassa, both internally and as a gargle, alternating internally with the sulphate of quinia, and applies a liniment, composed of ol. terebinth and lard or olive oil, externally, to the throat.

Dr. Lee concurred substantially in the views expressed by Dr. Forwood.

ELECTION OF OFFICERS.

At the conclusion of the discussion, an election of officers for the ensuing year was held, and resulted as follows:

For President, Dr. David Riley.

For Vice-President, Dr. D. Preston Wysong.

For Secretary, Dr. W. Stump Forwood.

For Treasurer, Dr. Richard D. Lee.

Dr. Lee was appointed by the President to introduce the general subject of *Inflammatory Diseases* for discussion at the next regular meeting.

The Society then adjourned to hold a special meeting with the *Medical Society of Cecil County*, at Havre de Grace, on the second Tuesday in June, and to hold its regular meeting in the same city on the second Tuesday in July.

CORRESPONDENCE.

EARLY TREATMENT OF PRESIDENT GARFIELD: INTERESTING LETTER FROM DR. TOWNSHEND, OF WASHINGTON.

WASHINGTON, D. C., July 6th, 1881.

Editors Maryland Medical Journal:

Gentlemen.—I have your letter of the 4th asking a statement of the President's case as far as my observation went. So much has been said and written on this subject that I fear but little interest will attach to anything I may recount touching my experience therewith. I was called to the President's side about 9.25 o'clock, on the morning of the 2nd inst., some four or five minutes after the wound was received. When I found him, the shock had just resulted in a faint, and slight vomiting had occurred. Pulse at wrist was not discernible. His head had been considerably elevated. I immediately ordered his head lowered and prescribed aromatic spirits of ammonia and brandy. As soon as this medicine arrived I administered a dose, and it effected an immediate revival. Chief Engineer Cronin, of our fire department, came in at the moment, told me he had a fast horse at the door, and asked me what he could do. I instructed him to drive as quickly as possible for Dr.

Baxter, who, I understood, was the President's physician. I asked the President, then, where he felt the most pain, to which he replied: "In the right leg and foot." I asked him the character of the pain and he replied that it was a prickling sensation. I thought this at the time was a premonitory symptom of paralysis, and judged there must be some injury to the spine. The President was, at the time, lying on his back; and, as I understood that the wound had been received in the back, I asked him if he could turn over. He responded promptly: "Oh, yes, sir," and suiting the action to the word did turn upon his face. This action on his part reassured me somewhat, and I immediately went to work to get at the wound. His clothing had been loosened from the front; and, lifting his shirt, I found where the bullet had entered. The wound was located about two inches to the right of the fourth lumbar vertebra, between the tenth and eleventh ribs.

I made only a hurried examination at that time, not attempting, of course, to trace direction taken by the bullet, but merely to ascertain locality and nature of wound. My impression at this time was that the wound was necessarily a fatal one.

I had the President turned upon his back again, and he inquired what I thought of his condition. I gave him an encouraging reply, of course, but I fear he was not much encouraged.

Noticing that the crowd was continuing to press around and in upon the wounded man, I deemed it best to have him removed to some more private apartment, and accepted the offer of Supt. Sharp of a private and comfortable room on the floor above in the depot building. I then had him placed upon a mattress and conveyed up stairs. Upon getting him into the room on the second floor, I noticed signs of returning exhaustion and again administered a stimulant. This revived him, and he requested to be taken to the White House. Shortly after this time Drs. Purvis, Bliss and Woodward, arrived, and, acting upon the President's request, a hurried consultation was held, and it was decided to remove him to the Executive Mansion. He was

accordingly carried down, placed in an ambulance, and Dr. Bliss and myself accompanied him to the room in which he now lies at the White House. He was considerably exhausted upon arrival at the White House, and complained of severe pain in the right hypogastric region, and a disagreeable tingling sensation in both lower extremities. Upon consultation, a hypodermic injection of one-sixth of a grain of morphia and one ninety-sixth of atropia was decided upon and administered. It was then decided not to disturb the President further until three o'clock, at which hour another consultation was ordered, and it was expected that an attempt would then be made to locate the bullet. At three o'clock he was found to be still suffering much pain. Another hypodermic injection of morphia and atropia was given and examination adjourned until the next consultation, which was called for seven o'clock. In the meantime lime water and milk was administered to allay nausea.

Just previous to the time set for next consultation Mrs. Garfield arrived, and her being introduced into the President's room delayed proceedings until eight o'clock, when an attempt was made to trace the ball. Surgeon-General Wales, of the navy, made the examination and found, by introducing his finger, that the ball had entered the body about two inches to the right of the fourth lumbar vertebra, between the tenth and eleventh ribs, fracturing the upper edge of the eleventh rib and passing through the lower portion of the liver. It could not be traced further. Another consultation was called for seven o'clock in the morning, but upon a visit made at eleven o'clock that night, I found his symptoms had grown alarming. Pulse was 158, respiration 35, and temperature $96\frac{1}{2}$. We all thought, at that time, that the President could not live until morning. In the morning, when the consulting board convened, we found a great change for the better. The President was still suffering from pain in the lower extremities, and another injection of morphia was administered.

He continued to grow better during the day, and I understand his favorable

condition has kept up since.

That was the last time I was called in consultation.

Yours very truly,

SMITH TOWNSHEND, M. D.

212 4¹/₂ Street.

EDITORIAL.

A NEW DEPARTURE IN THE TREATMENT OF THE INSANE.—At "Matley Hill," a private sanitarium, situated nine miles from Baltimore, which has, under the able and energetic management of Dr. J. S. Conrad, already taken a high rank among institutions of the class to which it belongs, a new and novel feature has been just introduced, the result of which may be anticipated with a well deserved interest. It consists of out-door life for invalids suffering from mild forms of mental disease, nervous prostration, and paralysis. Accommodations are provided in tents, made of heavy canvas with flies, and board floors elevated six inches above ground. The tents are neatly furnished, and the ample lawn affords opportunity of selecting shaded grounds, or sun exposure as may be deemed best.

This is certainly a valuable advance upon the older methods of treating such cases. The influence of the sun, air and novel mode of life, to which patients are subjected by the method of Dr. Conrad, cannot but be highly beneficial, and it seems singular when so much attention has been paid of late to hygiene in all other departments of therapeutics, that such an application of it should never have occurred to alienists and neurologists before.

Again, these patients have no summer resorts open to them, owing to the peculiar nature of their diseases, and many of them are kept in close rooms at home in the cities simply because there is no place for them to go to in the country; for which they would willingly pay. Under the "tent-encampment" arrangement, they can have the advantages of out-door life and fresh air, besides medical treatment and suitable diet.

It is certainly pleasant to reflect that many patients have been locked up, day and night, in asylums, who can now en-

joy the blessings and privileges which life among the trees, and under the open canopy of heaven, confer.

We are confident the day is not far off when the method of out-door life in mental and nervous diseases, which has already been put in successful operation at "Matley Hill," will become universal.

POWERS OF THE STATE BOARD OF HEALTH.—In our last issue we related briefly and without comment, the circumstances connected with the Jenkins' Run Nuisance. The ventilation of this subject which has been going on of late in the daily papers, has developed a remarkable diversity of opinion as to the power conferred upon the State Board of Health in connection with the abatement of nuisances. On the one hand, the attorney general of the State himself a member of the Board, in defining the jurisdiction of that body to do away with nuisances, says:

"The purpose of the act in creating the State Board of Health was to charge that body with the task of collecting sanitary information and with the investigation of nuisances, which were of such magnitude as to endanger the health of the community. It manifestly did not intend to impose upon your board any duty in relation to local nuisances of less importance. It placed at the disposal of your board no means which would enable it to perform such extended labor. It gave to your board no power to command the services of any state's attorney, or any police agencies. It did not make it the duty of your board to suppress any nuisance. It intended that your powers should be wholly advisory, except in cases where, in view of some emergency appearing in your judgment to require such action, you might deem it to be proper to intervene by proceedings for an injunction in a court of equity, and thus aid in enforcing the observance of the sanitary and criminal laws of the state, applicable to the particular existing grievance. This board will be, I am sure, disposed to make use of its single and exceptional power in the present case, if the petitioners will do their duty." This duty he elsewhere explains to be "to go before the grand jury of Baltimore county, in order that the offenders might be duly presented and prose-

cuted." On the other hand, Mr. James A. Buchanan, one of the citizens living in the offensive district, and himself a lawyer of no less prominence than the attorney general, quotes the third section of the same act, in which, among other things, it is said: "They shall inquire into and investigate all nuisances affecting the public health in any county, city or village in the State, and are authorized and empowered by information or petition filed in the name of the board, to apply to its judges or any judge of the circuit court for the county in which such nuisance shall exist, or to the judge of the Circuit Court of Baltimore City, as the case may be, in term time or vacation, for an injunction to restrain and prevent such nuisance, no matter by whom or by what authority committed."

"I submit," adds Mr. B., "that it is impossible for the English language to give more full and complete authority to abate nuisances than this section confers upon the State Board of Health, and I am at a loss to know why the board, with such ample powers at its command, should remain passive while the citizens of Baltimore are suffering from the Jenkins' Run nuisance."

Where lawyers differ we will not undertake to decide. However, it does not appear to us plain, that the authority spoken of in the section above quoted is so exceptional and confined to cases of emergency as the attorney general would lead us to think. It seems highly desirable, to say the least, in view of the differences of opinion thus elicited, that the powers and duties of the board should be settled definitely by the proper tribunal, which we presume is the Court of Appeals of the State.

It is also in the highest degree desirable that all matters relating to the public health should be entrusted to some competent and well recognized person or persons, who shall have all the necessary authority to deal effectively with every sanitary question that may arise, nay more, to whom it shall be the positive duty to so deal. What is everybody's duty is nobody's duty, and if such matters are left to the citizens generally, either in their individual or combined capacities, they will be sure to be neglected. The Board of Health shorn of the power to

act, loses the greater part of its significance. If our Board of Health has only an advisory function, it is high time the profession were taking action in their corporate capacity to secure for it, from the legislature such grant of authority as will make it not merely a body to advise measures conducive or essential to the public health and welfare, but also to execute the same.

MISCELLANY.

A CURIOUS CASE.—At the last meeting of the Baltimore Academy of Medicine, Dr. Taneyhill exhibited a fibroid polypus of the uterus from a patient aged 81. Its existence had been known of for many years, and she had been urged by several physicians, who attended her, to allow it to be removed, but would never consent. On the 4th of June, Dr. T. was called and found his patient lying at the bottom of the stair, suffering from considerable hemorrhage, which however, was easily checked. She had fallen down a long flight of stairs, the polypus had been detached and expelled during her descent and was found upon the stair. Examination revealed a slightly dilated os. The specimen weighed 7 ounces, was oval in shape and was $7\frac{1}{2}$ by $3\frac{1}{2}$ inches in dimensions.

DR. I. E. ATKINSON, with a view to determine the relation, if any, existing between the use of iodide of potassium and renal disease, made a series of observations on seventy cases of late syphilis. The result was, that, whilst there was evidence of renal irritation, apparently catarrhal, and indicated by the appearance of mucous or hyaline casts and albumen in the urine, in no case was extensive parenchymatous inflammation of the kidneys excited, and the conclusion was that the evil effects of the iodide are small and for the most part transitory.—*American Journal Med. Sciences*, July, 1881.

DR. L. McLANE TIFFANY, in an article suggested by a case of shoulder-joint amputation, which proved fatal from secondary hemorrhage, advises in this operation, particularly where there has been bone injury or extensive lesion

of the soft parts, to draw the axillary artery out of the wound with the toothed forceps, and to strip it of connective tissue for certainly three inches, before applying the ligature, and dividing the vessel; large branches to be treated similarly. To avoid neuralgia on cicatrization, he also recommends to draw strongly on the large nerves and cut them off close.—*Id.*

DR. THOS. F. WOOD, the new President of the North Carolina Medical Society, in his remarks accepting the position, very beautifully compared the annual meetings of the Society to "points of ossification in the medical body bidding fair in time to develop into a vigorous and well-knit structure."

THE only case of psychical impotence that I have ever met with is the following: A widower, 52 years of age, was engaged to be married; and, despite the fact that he had erections in the presence of the object of his affections, he was so fearful that he would disgrace himself on the night of his wedding, that he made the experiment with another woman and failed utterly. As a consequence of this unfortunate test, he constantly brooded over his imaginary trouble, for which he sought my opinion. I found that his genital organs and prostatic urethra were perfectly normal, and succeeded in obtaining his confidence by assuring him that I had met with many cases of a similar nature, and that they had always yielded readily to teaspoonful doses of fl. ext. damiana, taken every eight hours, for three days before marriage. As a result of this ruse, he subsequently wrote me that the remedy had acted like a charm.—*S. W. Gross, Treatise on Impotence, &c.*

ABSCESS OF LIVER FROM BRAIN LESIONS.—The fact that abscesses of the liver may be associated with cerebral hyperæmia, probably as a direct result, was pointed out by me a short time since (*St. Louis Clinical Record*, June, 1878), and several cases detailed in which aspiration had led to the evacuation of pus from the liver. Since the publication of the original paper on the subject, other similar cases have come

under my notice, and like ones have been reported by other observers. It is probable, however, that other brain lesions—as is well known of blows on the head—are capable of inducing the condition in question.—*Hammond's Diseases of the Nervous System, 7th Ed., 1881.*

A DEATH FROM VAGINAL INJECTION.—The patient was stooping over a basin and injecting an infusion of oak bark, using a Davidson's Syringe. Suddenly she experienced violent pains and cramps, and peritonitis set in, followed by death in five days.—*Louisville Medical News.*

PROPHYLACTIC FOR SCARLET FEVER AND DIPHTHERIA.—Dr. F. Peyre Porcher, of Charleston, proposes the following, to be taken by those *exposed* to these diseases: R. chlorate of potash, 3 ii; quinia, gr. xv; hyposulphite of soda, 3 ii; tr. chloride of iron, 3 ii; water, 3 vii. Desertspoonful thrice daily.—*Med. News. & Abst.*

EARLIEST POST-MORTEM IN AMERICA.—The earliest reference that I have found to a post-mortem examination in America, is contained in a manuscript order of the Council of Lord Baltimore, dated St. Mary's, in Maryland, July 20, 1670. In it, John Stansley and John Pearce, Chyrurgeons, are ordered to view, on Monday, August 8, 1670, the head of one Benjamin Price, supposed to have been killed by the Indians.—*E. M. Hartwell, The Study of Human Anatomy.*

ELECTRICITY IN UTERINE INERTIA, POST-PARTUM HEMORRHAGE AND RETAINED PLACENTA.—Remarkable results have been obtained. One electrode of the faradic battery is introduced far enough to come in contact with the womb, and the other is placed on the hypogastrium. The current should be strong enough to excite firm contraction, which it will hardly fail to do. This is a more certain and scientific expedient, and, also, a greatly more expeditious one than the use of ergot.—*Bartholow's Medical Electricity.*

MEDICAL ITEMS.

TWENTY-SIX States have Boards of Health = No one should inflict a paper on a medical society unless it reviews progress or contains something presumably new and valuable. — *Record*. = Syphilis is said not to be found in Iceland, the Faroe Islands and Central Africa = Dr. Richardson, in his Ideal City, insists that all houses should be built upon arches, with spaces in all directions for the air to circulate through. = The forty-ninth annual meeting of the British Medical Association will be held at Ryde, Isle of Wight, August 9th to 12th, 1881 = Dr. Dunlop has just bequeathed two scholarships of \$500 each (for three years), to Edinb. Univ. Med. School. = A case is reported where a young woman lost her hair entirely in three days, from fright. The alopecia subsequently became general. Two years later condition unchanged. = The French Anti-Tobacco Society has 1,000 members and gives prizes. = Gov. Long, of Massachusetts, urges that distinct asylums should be provided for insane criminals = The *Lancet*, whilst not questioning the educability of women to the level of men, insists that "the possible is not always the prudent." = Dr. Beard defines insanity to be "a disease of the brain in which mental co-ordination is seriously impaired." = Dr. Marion Sims has recovered and is now in London. = A singular method of evincing gratitude to a doctor was exhibited by Thomas Hobson, 78 years old, who hanged himself in the Prestwich workhouse, after bequeathing his body to his medical attendant, "in gratitude for his kindness and urbanity." = A lunatic died in France, aged 103, who imagined himself glass and had scarcely moved since 1797, and only once spoken, to ask for tobacco. = Mr. Jonathan Hutchinson has four patients living at periods of three or more years after amputation of can-

cerous tongues, in whom the microscope left not the slightest doubt as to the diagnosis. = Prof. T. Gaillard Thomas has resigned his chair in the College of Physicians and Surgeons, New York, and is now Prof. Emeritus. He will, nevertheless, deliver a course of lectures in the College next season. Dr. Mundé has been appointed Lecturer on Gynecology. = Sir Thomas Brown spoke of "quacks and charlatans, whose impostures are full of cruelty and worse than any other, and delude not only into pecuniary divertations, but the irreparable deceit of death." = Hydrobromic acid will counteract the tendency of sulph. quiniæ to produce cerebral congestion. — *Hammond*. = The Association of German Surgeons must have been a jolly set; a reporter says no one knew when or where the closing festivities ended. = The Legislature of North Carolina appropriates the magnificent sum of \$200 per annum to pay the expenses of its State Board of Health. = "If a doctor has the luck to find out a new malady, it is tied to his name like a tin kettle to a dog's tail, and he goes clattering down the highway of fame to posterity with his æolian attachment following at his heels." — *Holmes*. = A case is reported in the *New York Med. Record* of "Inoculation of Both Eyes for Complete Pannus with Gonorrhœal Pus and Recovery of Sight After Eleven Years of Blindness." = A Clinical Professor of Diseases of the Nervous System is to be added to the Faculty of Medicine, of Paris. = Dr. D. W. Yandell is receiving a warm welcome in London, where his genial wit and wisdom are much appreciated. — *Brit. Med. Journ.* = Charcot locates the faculty of speech in the right half of the cerebrum. = The *Archives de Neurologie* is a new quarterly published under the direction of Charcot. = *Erratum*: In the notice of "A Curious Autopsy," in our last issue, the condition resembling old pipes was found in the *bony* not "*lung*" tissues.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

OPTIC NEURITIS.

BY A. FRIEDENWALD, M. D.,

Professor of Diseases of the Eye and Ear, College of Physicians and Surgeons, Baltimore.

(Read before the Baltimore Medical Association, April 11th, 1881).

The frequent occurrence of visual disturbances in the course of brain affections did not escape the observation of the older physicians; but the relation of the central lesion with the eye trouble remained quite a mystery until recent times. The first theory that suggested itself, in explanation of this phenomenon, was that the optic nerve was directly assailed, either by pressure exerted by disease in close proximity with the nerve, by inflammation extending to it, or else by the destructive influence of morbid processes attacking the optic nerve centre. These theories failed to prove themselves tenable, for frequently the anatomical lesion was found not only remote from the optic nerve tract, but also from the optic nerve centre; and, besides this, they failed to explain the common observation that both eyes were simultaneously affected irrespective of the seat that the disease would be found to occupy.

The ophthalmoscope first revealed the fact that in these conditions the nerve was in a state of inflammation. Further anatomical investigations proved that often the inflammation restricted itself to the intra-ocular portion of the nerve, while in other cases it involved the nerve trunk primarily and consecutively extended to its intra-ocular termination.

The credit belongs to Von Graefe, not only for having first pointed out these two forms of optic neuritis, but also for having furnished the first plausible theory in its explanation. He found that in certain diseases of the brain, and especially in cases of intra-cranial tumors, the intra-ocular termination of the optic nerve was involved in a peculiar inflammation, which he termed the *engorged papilla*, in which the optic nerve trunk appeared entirely free from disease. Not being able to trace the inflammation of the papilla to a similar condition of the intra-ocular portion of the optic nerve, he was led to attribute it to a congestion due to a compression of the cavernous sinus. He was induced to adopt this view, for the ophthalmoscopic picture of the engorged papilla furnished him the expression of a high degree of venous congestion depending upon a retarded return of venous blood to the brain. Inasmuch as these brain affections are

seldom found to exert direct pressure upon the sinus, he regarded them as encroaching upon the intra-cranial space and indirectly exerting pressure upon the sinus, which in turn prevented the return of venous blood from the retinal vessels. The fact that in affections of the orbit, in which the nerve trunk is subjected to pressure, the identical appearance of the papilla is observed, seemed to him to furnish him additional evidence for his conclusions.

The second form of development of optic neuritis he attributed to the extension of an inflammation from the meninges at the base of the brain to the sheath of the optic nerve and finally to the optic disk. This variety he termed *descending neuritis*, in contra-distinction to the former variety, upon which, in addition to the *engorged papilla*, he bestowed the term *ascending neuritis*.

Although new light has been shed upon this subject since Von Graefe's time, we now recognize a different relation between intra-cranial disease and optic neuritis, in consequence of which his classification has not been able to maintain itself permanently, yet his labors in this field will always be regarded as fraught with invaluable revelations. He established the fact that intra-cranial affections, whether remote from the optic nerves, by means of pressure, or by the affections being in proximity to the nerves, through an extension of the inflammation, were capable of causing optic neuritis in both eyes simultaneously. It was further established that the closest examination of the neuritis would not permit deductions by which the brain affection could be located, though the utility of the ophthalmoscope as a means of diagnosis in cerebral affections was satisfactorily demonstrated thereby.

The first formidable objection which Von Graefe's teachings encountered was offered by Seseman, who pointed out the fact that the *vena centralis retinae* could empty itself satisfactorily through the extensive connections of the superior ophthalmic with the anterior facial vein, even though a complete and permanent compression of the cavernous sinus existed.

This was followed by the important researches of Schwalbe, on the relations of

the intervaginal space of the optic nerve with the subarachnoidal space of the brain. The important discovery that results from these investigations led Schmidt to attribute the phenomenon of the engorged papilla to pressure due to a collection of subarachnoidal fluid driven out of the skull by either intra-cranial tumors or other diseases, and collecting in quantity in the inter-vaginal space of the optic nerve. Previous to this, cases had already been reported by Stellweg and Manz, in which cerebral and meningeal affections were associated with hydrops of the optic sheath, but the full importance of their observations was not realized until Manz, in 1871, made a series of very interesting experiments on animals, in which he injected various fluids into the subarachnoid space, and readily established thereby dilatation and tortuosity of the retinal veins, and, at times, redness and swelling of the optic papilla. Following these investigations, autopsies abundantly proved that the engorged papilla was due to hydrops of the optic sheath. The fact that this condition of the optic sheath had previously been overlooked is explained by the loss of the fluid distending the sheath, occasioned by the injury to the sheath on removing the brain. A careful examination in respect to this condition absolutely requires that a ligature be placed around the nerve before the brain is removed.

There has been considerable discussion as to whether the optic papilla in these conditions is to be regarded as in a state of inflammation, as the term optic neuritis would necessarily imply, or whether it should be exclusively regarded as being in a state of passive congestion and oedema, as is devoted by the term *choked disk*, introduced by Dr Clifford Allbut, and most generally employed by English writers. Leber has suggested the term *papillitis*, in lieu of *optic neuritis*, as having the advantage of expressing accurately the situation of the disease. This is demanded by the nature of the difficulty, for a considerable quantity of subarachnoidal fluid may be driven out of the skull and forced into the intervaginal space, causing decided pressure upon the nerve, arresting the return of blood from the retinal veins, establishing oedematous

swelling of the intra-ocular portion of the nerve; this, together with the unyielding character of the scleral ring, may cause a degree of strangulation preventing the ready entrance of blood into the retinal arteries, and still the extra-ocular portion of the nerve may show no signs of inflammation. Consequently, the changes just enumerated as taking place in the papilla, true inflammation may be established, and in such a case no more appropriate term than papillitis could be employed. But a high degree of congestion and swelling may continue for a considerable time, and the papilla may, notwithstanding, escape an inflammation. A very instructive case of this character has been reported by Iwanhoff. In this case, the unmistakable ophthalmoscopic evidences of disease had been observed during a whole year, vision remaining, however, undisturbed, the post-mortem examination revealing a marked hyperæmia of all the vessels and considerable œdema, but no true inflammatory change. Here the term of *choked disk* would be more applicable. Unfortunately, the ophthalmoscope does not enable us to distinguish between these two conditions, nor will it be able to establish accurately whether the picture which it reveals is due to disease situated in the papilla exclusively, or whether it is a condition beginning in the optic nerve trunk and extending to its intra-ocular termination. Brudenel Carter says in regard to this: "Many attempts have been made by various authors to distinguish *neuritis optica* from perineuritis, and both from mere mechanical obstruction, but I have never been able to satisfy myself of the validity of the distinctions that have been drawn." Indeed, even the anatomical examination, if restricted to the optic nerve, may sometimes fail to permit deductions as to the starting point of the disease. In perineuritis there may be a considerable effusion into the intervaginal space, a direct result of the local inflammation, which may present an appearance closely resembling the condition due to the fluid being driven into the sheath by intracranial disease.

Among the various causes leading to the ophthalmoscopic changes described under the various terms of optic neuritis,

engorged papilla, choked disk and papillitis, unquestionably cerebral tumors play the most prominent *role*. Hughlings Jackson, who probably has had the largest experience in this field of investigation, declares that tumors of the brain are almost invariably accompanied by disease of the optic nerve. Reich found in fifty-eight cases after autopsies ninety-five per cent of papillitis or papillitic atrophy, while in only five per cent. of the cases were no alterations found. The circumstance that formerly the frequency of the optic nerve complication was underrated by internal clinicians, is to be attributed to the fact that these conditions of the nerve may continue for a long time and indeed the case may end in death, without having caused any visual disturbances, whatever. The integrity of the visual power does not exclude the probability that the nerve may have been subjected to important anatomical changes; therefore, in all cases where brain diseases may be suspected, the ophthalmoscopic examination should not be neglected. It is true, in extremely exceptional cases, that the optic nerve complication is entirely wanting, probably owing to the fact that the life of the patient is extinguished before the case reaches that stage of development.

Hughlings Jackson reports a case in the Ophthalmic Hospital Reports, in 1876, where a cerebral tumor was found, and where no evidence of optic neuritis had been furnished.

What is still more perplexing is that occasionally the characteristic ophthalmoscopic change may be found, and the brain may enjoy perfect immunity from disease. In evidence of this, I quote the following from Brudenel Carter's work on the diseases of the eye: "We had a little boy in St. George's Hospital, in 1872, who was transferred from my care to that of Dr. Fuller, and who had choked disks of the most typical character. Dr. Hughlings Jackson saw him, and entertained no doubt that he was the subject of some form of brain disease, and the same opinion was expressed by Dr. Noyes, of New York, and by several members of the Ophthalmological Congress, which was then assembled in London. The boy died of pleurisy supervening upon kidney disease, and no

trace of mischief in his brain could be discovered by the most careful examination. To mention another variety among the exceptions, to what may be adopted as a general rule, that cerebral tumors and other coarse brain disease almost invariably produce the choked disk, I cite another case from Carter, of a young lady presenting the typical ophthalmoscopic picture of nephritic retinitis, who died with healthy kidneys, of a tumor of the cerebellum.

(To be Continued).

TWO CASES OF SCURVY, WITH SOME REMARKS UPON THE ETIOLOGY OF THAT DISEASE.

BY O. J. COSKERY, M. D.,

Professor of Surgery, College Physicians and Surgeons, Baltimore.

(Read before the Clinical Society of Maryland).

George K., aged 25, a German shoemaker, was admitted October 18th, 1880, suffering from tuberculosis. Although cavities were present, especially in the right lung, the patient was up and about and seemed good for several months. He was, however, very anæmic, had a yellowish-green complexion, a flabby large tongue, and small, rapid, feeble pulse. During the third week of November, noticed, several mornings in succession, that there was blood upon his pillow, and clotted blood in the nostrils. On November 19th, profuse bleeding from the nose came on, which was stopped, with some difficulty, by cold. Ergot and iron internally were given, and the cold applications continued, but the bleeding still occurred each day until November 25th, when, as hemorrhage had been going on from 7 A. M. to 1 P. M., recourse was had to the solid sub-sulphate of iron carried into the nose on the tip of the finger, and there pressed for some minutes. The bleeding never returned. Two days afterwards, the patient complained that hot, cold, or solid food "hurt his mouth," and on examination it was found that the gum behind his median and lateral incisors was swollen and somewhat red. This spread from day to day until the teeth,

with the exception of the incisors of both jaws, were completely covered back and front. Salivation, very offensive breath, enlargement of the submaxillary glands and lymphatic glands of the neck, complete inability to take anything, even milk, into the mouth without pain, and difficulty in closing the lips, with diarrhoea, came on, and the patient died exhausted by pain and starvation, on December 2nd, 1880. There had never been complaint of rheumatic pains, there were no spots of any kind upon his person, and from the time of his entrance into the hospital, on October 18th, he had the same diet as, or better than, the other patients. Upon inquiry, it was found that his diet at home had been the same as that of the balance of his family, none of whom presented any such symptoms, and that it consisted of the food generally used by the laboring classes, and containing the usual quantity of vegetables.

Giacconelli, D. S., aged 45, an Italian stonecutter, had always been well up to about four weeks before admission, when he was attacked with pains in his legs, ankles and knees (rheumatic in character), for which he was admitted April 3rd, 1881. On examining his lower extremities no joint swellings were to be discovered, but from groin to ankle both limbs were found to be covered with superficial patches varying in size from a pin's head to a silver dime, and generally livid in color. The patient walked only with great pain and difficulty, referring the trouble more to the muscular structure than to the joints themselves.

The tongue was slightly coated, flabby and tooth-indented. His gums were soft, fungating, easily bleeding, and the breath was very offensive. Pulse soft and rapid, but there was no fever. Complexion swarthy. Thinking that the patient might have been taking some mercurial, and was salivated, he was ordered potassic iodide and chlorate wash. The condition steadily got worse, gums and petechiae, and the treatment was changed to small doses of quinia, large doses of arom. sulph. acid, and two lemons a day. The improvement was too marked and rapid to be a coincidence, and the patient left hospital well on May 5th, 1881.

I have brought these cases of scurvy before you principally because of the rarity of this disease, but also to call attention to some points in the etiology. As we are all aware scorbutus has almost disappeared even upon the sea, thanks to the efforts, more especially, of the English societies and admiralty. Still, it sometimes crops out not only on ship-board and in barracks, but also in civil practice. If there was supposed to be any well-established fact in the etiology of scurvy, as it used to be met with, it was that absence of variety or quality of diet of a vegetable character, and especially of that of the cabbage and potato families, or an insufficiency of fresh meats, sufficed to account for all the symptoms. That this was not the only factor in the production of the diseases has been long disproved. Still the fact, as witness below, that so many of our books of reference refer yet to this old idea is excuse enough for the presentation of the above cases, and the remarks.

In Kane's "Arctic Explorations," we find him speaking of the beneficial effects of sunlight upon his "poor fellows," as he calls them, even though the supply of "scraped potatoes" and walrus blubber remained the same. Within the last month an old sea captain of this port related to me the following fact: A ship of which he was in command sailed from Baltimore on January 1st, 1851, bound to San Francisco via Cape Horn. Canned vegetables and fruits were at that time unknown, but the vessel was well supplied with sour cabbage or kraut. This the sailors refused to touch, insisting upon the fact that they were Americans and not Dutchmen, and stuck pertinaciously to pork and beans. After being out 180 days, or upon July 1st, 1851, without a stoppage upon the voyage, even for water, they all landed at San Francisco without a single case of scurvy having appeared, while other ships out a shorter period, or which had stopped at intervening ports, and arriving upon the same day had the disease rife and in its worst forms. The cause that this gentleman gave of the absence of the disease from his own vessel was industry. He had never allowed his crew to remain idle one moment. However much truth there may be in the idea, he is fully con-

vinced that he saved his own men from this scourge by keeping them at work, were it only overhauling the chains. But let us return to the question of diet as a cause of scurvy, and first let us give some authorities in reference to this. Says Dr. Thomas Buzzard (Reynolds' Syst. Med., vol. ii, p. 450): "There is no case of scurvy on record as occurring in a person who has been adequately supplied with fresh succulent vegetables of good quality," which, I think we may call a first-class specimen of "hedging." In this dictum, we have to consider the "adequate supply," the "succulency" and the "quality" of the vegetable supply.

Dr. Wm. Baly, as quoted in Watson's Practice of Physic, Am. Ed. of 1858, p. 1209, says that "wherever this disease," (scurvy) "has prevailed, there the diet of the prisoner" (he is speaking of the Milbank Penitentiary, London), "though often abundant in other respects, has contained no potatoes, or only a very small quantity."

Dr. Syer Bristowe (Theory and Practice of Med. p. 565) defines scurvy in the following words: "Scurvy," he says, "may be regarded as a peculiar form of anæmia arising from deficiency of vegetable diet, and attended with a tendency to the occurrence of hemorrhages, and with profound impairment of nutrition and great mental and bodily prostration."

But if my cases were not true scurvy what were they? In the first, was the listless expression, the ugly greenish skin, the bleedings and the spongy gums. In the second we have the intermittent muscular pains, the petechiæ, and again the spongy gums. It is scarcely necessary to call your attention to the fact, that a complete collection of typical symptoms is the exception in any individual case of disease. Let us, however, examine the prominent symptoms of this disease as laid down in the text-books. First as to the condition of the skin: Do we not find the greenish-yellow hue in many other chronic diseases? And do we not find the sub-epidermal hemorrhages much more extensive in purpura? Again, in those ecstasies who have spots of blood or stigmata on their bodies do we not have

such a mental condition (as witness the case of the late Bernadette Soubirous) that these superficial hemorrhages can be produced at will, seemingly. Or let us take the rheumatic pains; how do we know that they are not the results of intermuscular or interfascicular hemorrhages? In these cases we do not necessarily find an absence of vegetable food, but in all of them we do find some depressing cause. This is the point I want to insist upon. For the spongy and swollen gums we well know that that condition is produced in perfection by the injudicious administration of mercury, and is there a greater depressant than mercury wrongly given.

Do not the cases given above show enough of the combination of symptoms that we find in Scorbutus to enable us to make a diagnosis? Supposing so, for the sake of argument, what had diet to do with them? I may answer nothing. While the absence or deficiency of vegetable diet in the production of attacks of scurvy is too well established to admit of doubt, still, what I wish particularly to bring forward is this: "Are our textbooks right in ignoring all other causes? It seems to me, without wishing to appear dogmatic, that any condition in which the plasticity of the blood and the normal resiliency of the vessels is decreased, such as may occur in many wasting diseases, may lead to the extravasations, superficial and deep, and to the accumulations of blood, as witness the spongy gums, that we find in scurvy, and these without deficiency of any particular article of diet. It is a well-known fact amongst sailors that scurvy is always worse in winter than in summer, and certainly vegetables can be kept better with any kind of care in winter than in summer. In what I have said I know that I have been forestalled, to an extent, by that great master, Niemeyer, who says (p. 729, vol. ii, Amer. Edition), "That scurvy does not depend exclusively upon the use of salt food, and want of fresh provisions, is proved still more forcibly; and, moreover, the hypothesis regarding the preponderance of the salts of soda over those of potash in scorbutic blood is overthrown by the fact that it also appears among people whose diet is almost entirely vegetable,

but who suffer from destitution, and live in cold, moist cellars, as is the case in Northern countries, especially in Russia."

A CASE OF PRIMARY SPINAL MENINGEAL HEMORRHAGE.

BY J. W. CHAMBERS, M. D.,

Demonstrator of Anatomy, College of Physicians and Surgeons, Baltimore.

(Read before the Baltimore Medical and Surgical Society, March, 1881).

On the 20th of last February I was requested to see H—, æt. 54, colored laborer, of intemperate habits. I found him sitting in a large high-backed chair, supported by other chairs placed around him, with his head resting upon a pillow, unable to rise from his seat.

I ascertained the following facts, partly from the family and partly from himself: His voice was clear and distinct but his breathing short, labored and abdominal. Saturday, the 19th, after doing his usual day's work, and going to market, as was his custom, he sat quietly smoking and enjoying the conversation of his family. Leaving the room he went up stairs; shortly afterwards a noise was heard as though he had fallen down the steps. His son, on going to see what had happened, found him at the foot of the stairs, where he had fallen, lying on his face. He was picked up and laid quietly on the floor. Up to this time he had not spoken. In the course of five minutes, consciousness had so far returned that he asked to be placed in a chair, which was done. As he was being raised he again fainted, but consciousness returned within a few moments.

During the time intervening between the fall and my visit, he had suffered with a stinging sensation in the neck and shoulders. At no time, after receiving the fall, was he able to move either hand or foot; if at all, not enough to attract the attention of the nurses, who were questioned closely upon that point. The patient had complained much of a sensation as if some one was pouring cold water down his back and limbs. Neither bowels nor bladder had acted during this time. I had the patient put to bed. On examination, I found complete paralysis of both lower and upper extremities,

except that he could slightly flex the left fore arm. Face and neck presented no evidence of paralysis; mind clear; there was tetanic stiffness of the vertebral column; both the upper and lower extremities were contracted; from time to time convulsive tremors occurred. All movements increased these phenomena; as when he raised his head or was moved in any way by his nurse. Irradiations occurred in the upper and lower limbs, particularly marked in the legs, under the form of cold sensations, tingling pains, and numbness. There was hyperæsthesia of the upper extremities, anæsthesia of the lower, more marked on the anterior aspect of the thighs, where he could be pricked with pins or pinched without giving the least evidence of pain. Sensations for heat and cold perfectly normal. Skin and tendon reflex entirely absent; dyspnœa distressing, attributed to the tympanites which was very highly marked indeed; paralysis of bladder and rectum; priapism which lasted for four days.

Patient was catheterized and a half pint of bloody urine was drawn. The spasmodic contraction of the adductors of the thighs was so strong that it was only with great difficulty that a vessel could be placed between his thighs, and they could be separated by great force only, which gave rise to much pain. Along the inner side of the right thigh, three large vesicles made their appearance on the third day, the contents of which at first were clear, but rapidly became brownish, and in the course of four or five days were dried up. These vesicles are not uncommon in any severe spinal lesion. On the eighth day of his illness his bowels were moved involuntarily and unconsciously.

In consideration of the above symptoms, a diagnosis of spinal meningeal hemorrhage was made, the greatest stress being laid on the suddenness of the attack, the constant contracted state of the limbs, attended with tinglings and the tetanic stiffness of the spinal column. It was also thought to be external to the dura mater, from the fact that Leyden has shown that numerous venous plexuses are found in the cellular tissue, between the vertebra and the dura, which

furnish the anatomical conditions which are likely to give rise to such hemorrhage; and, furthermore, that hemorrhage into the arachnoid was very rare, and did not produce symptoms as grave as were presented in this case.

The symptoms remained about the same except as they were modified by the increasing exhaustion until the eleventh day, when he began to grow less clear and the breathing became more labored, until, finally, he sank into a state of coma, and died on the evening of the twelfth day.

Autopsy fifteen hours after death: Spinal cord opened from the third cervical to the third lumbar vertebra. The following conditions were found: A dark coagulated extravasation covered the outer surface of the dura mater to a varying extent, and infiltrated the cellular tissue between it and the vertebral canal; in the anterior wall, were noticed here and there, separate foci. The extravasation was quite marked around the nerve trunks as they passed out of the vertebral canal. These conditions commenced at the sixth cervical vertebra and extended down the entire length of the spinal cord, being more general in the lower dorsal and lumbar regions. In the cervical and upper dorsal regions the hemorrhage partook more of the nature of separate foci, situated mostly around the nerve roots. The spinal fluid was turbid and bloody in appearance. Closely adherent to the posterior portion of the vertebral canal was noticed quite an amount of coagulated lymph. The heart, lungs and brain, were found in a healthy condition.

Little seems to be known regarding the individual predisposition to spinal meningeal hemorrhage; it is incident to the two extremes of life, infancy and old age. Most of the cases reported occurred in men above forty years of age. Of the relation between spinal meningeal hemorrhage and degeneration of blood vessels little is known. Injuries to the spinal column seem to be among the most frequent causes, with or without direct lesion to the membranes. Excessive bodily exertion, as the lifting of heavy weights or sudden and violent movements may be causes of hemor-

rhage (Rabow and Gull) as in the apoplexes so often found at the post-mortem in cases of tetanus, eclampsia and trismus neonatorum.

Thus it appears that the affection is mostly secondary. According to Haymen it was primary but twice in thirty-eight cases. I have been forced to conclude that the case I have reported was primary, and that the fall was a consequence and not the cause of the spinal hemorrhage. There was no evidence that the spine had received any injury in the fall, as the bruises on the forehead showed plainly that he fell on his face and not on the back. Thus the spine did not receive any direct hurt, and any violent movements that he might or could have made were not likely to have been so general as to produce extravasation throughout the length of the spine.

The symptoms of spinal meningeal hemorrhage in the majority of cases come on suddenly and are apoplectiform in character. The patient is seized suddenly with violent pains in the back, and falls down paralyzed in the limbs. In addition to the pain and paralysis are tetanic stiffness of the vertebral column, tonic spasm of the muscles that receive their nerves from the portion of the cord affected, eccentric sensations, pain, formication, burning, cold, tingling, frequent spasmodic tremors, &c. Sensibility is also affected.

Jackson has reported a case in which the symptoms of irritation were altogether wanting. In my case, the apoplectiform seizure, the tetanic stiffness of the spinal column, the tonic spasm of the muscles, the convulsive tremors, and the eccentric sensations were thoroughly marked, though the violent pains spoken of by authors were almost entirely absent. There were slight tingling sensations through the shoulders and down the arms, which were so slight as to give rise to but little inconvenience. Reflex excitability has been found lessened in a few cases; it was altogether wanting in the case under discussion. Weakness of the bladder and rectum are rarely mentioned. In the above related case paralysis of the bladder and rectum was complete during his entire illness. The tem-

perature at no time during his sickness was above the normal.

The symptoms will be slightly modified according to the various levels occupied by the extravasations into the spinal canal.

The prognosis according to Leyden is generally favorable; in fact he states that it is rare that it is so extensive as to give rise to any marked symptoms. Erb states that in the majority of cases the disease runs a favorable course and that in a few weeks, or at most months, a tolerably satisfactory recovery may be expected. Death does sometimes occur within a few hours or days as when the extravasation is at a high level and produces disturbance of the heart and respiration, or when the blood extends upwards to the brain, or when the centres receive a sudden and severe impression. If the extravasation is sufficient to produce a complete paraplegia, death may occur at a later stage from cystitis, bed sores, etc.

There are a series of spinal troubles which closely resemble meningeal apoplexy, and might readily be mistaken for it; as shock of the spinal cord, in which the spastic condition of the muscles is wanting; spinal apoplexy in which the pain and the tendency to spasm are less marked (according to Brown-Sequard, the spastic condition is always absent in spinal apoplexy); meningitis and myelitis which do not develop so suddenly, or if they do, are always accompanied by fever. For the diagnosis of the seat of the hemorrhage, the points given above may suffice. It may also be ascertained from the distribution of the symptoms of the paralysis or irritation.

The treatment should be altogether expectant when the symptoms of meningeal hemorrhage have occurred; first order absolute rest on the face or side, administration of opium to relieve the pain, ice, ergot, &c., according to the indications.

SANITARY TRACTS, COMPILED
FROM MEMORANDA ON PRE-
CAUTIONS AGAINST CON-
TAGIOUS AND INFEC-
TIOUS DISEASES.

BY C. W. CHANCELLOR, M. D.,
Secretary of the Maryland State Board of
Health.

NO. VI.

SALT WATER BATHS.

The chief of all "mineral waters" is sea-water. Let us examine its composition. Its specific gravity is 1027, and the quantity of salt dissolved in it ranges from 3.5 to 4 per cent. The following is the analysis of an English chemist :

Water.....	963.8
Chloride of Sodium (Common Salt).....	25.8
Chloride of Potassium.....	0.8
Chloride of Magnesium.....	4.0
Sulphate of Magnesia (Epsom Salt).....	2.0
Sulphate of Lime.....	1.4

1,000.0

Sea-bathing is generally preferable to bathing in river or spring water. It excites the action of the muscles, stimulates the vessels of the skin, causes an increased determination of blood to the surface of the body and promotes all the secretions more certainly than the fresh water bath. A sea-bath has also another great advantage over all other forms of bath, and that is that it is taken in the purest air possible. It is impossible to separate the effects of sea-air from those of the sea-water. The sea-bather is constantly inhaling the spray of the sea-water, and thus obtains whatever benefit is to be got in this way. He also enjoys the benefit of the motion of the water and the buffeting he gets from the waves. Reaction more readily occurs after a sea-bath than after a river or ordinary bath, and persons of delicate habits are less susceptible to cold from being wet with salt water than with fresh water, although the popular belief that it is impossible to take cold from a wetting with salt water is far from being true.

Bathing in the sea, by exposing the body for a time to a medium of lower temperature than it has been accustomed to, combined as it commonly is at a seaside resort, with the opportunity of breathing pure air, of enjoying moderate exercise, and indulging in agreeable society and innocent amusements, strengthens the constitution and invigorates the mind. Indeed, in many cases, after even a short course of judiciously regulated sea-bathing, it is difficult to recognize the languid invalid who a few weeks before had repaired to the sea-coast in a state of great debility.

It may be observed, generally, that sea-bathing is more applicable to chronic than to acute disorders, and that it is most likely to be of service in diseases originating from a diminished energy in the vital functions, and attended by symptoms of languor and debility, such as intermittent fevers, nervous diseases, palpitation of the heart, hypochondriasis, hysterical and other female affections, nervous headache, bilious complaints, scrofula, rickets, and sterility from debility of constitution.

The effects of sea-bathing may be equally beneficial, whether the reduced state of the system be owing to constitutional delicacy increased by effeminate modes of living, or the result of injury to the constitution, either from exposure to insalubrious climates, by habitual indulgence in too stimulating a diet, or by excess in bodily or mental exertion.

RULES FOR SEA-BATHING.

1. Sea-bathing should be continued for at least five or six weeks, at two periods in the year, making June a part of the one period and September of the other.

2. Bathing ought not to be commenced until two or three days after arriving at the sea-coast. The delicate ought gradually to prepare themselves for it by previously using the *tepid*

bath at a temperature commencing at 90°, lowered five degrees each time, and terminating at 65°. It is an indispensable rule never to bathe while under the influence of medicine, or with a full stomach. The robust and healthy may bathe early in the morning before breakfast; but persons of a delicate or feeble constitution ought rather to bathe before dinner. It is better for such persons to bathe on alternate days, as daily bathing frequently produces lassitude and weakness.

3. It is better to take some moderate exercise before going into the water. Bathers ought not to wait on the edge of the sea until they are perfectly cool, as chilliness may supervene when the body is cold, which would not be felt if it were moderately warm when they went into the water.

4. It has long been considered a useful rule to have the head first wetted; but a sudden plunge, head foremost, into the water, is a violent and unnatural exertion which ought not to be practiced by delicate people. It is much better to remain completely immersed in deep, than to take repeated plunges in shallow water.

5. Upon coming out of the water the body should be wiped dry, with a rough towel, and the ordinary dress quickly resumed. It is more necessary to replace the usual vestments quickly than to delay to have the surface of the body perfectly dry, as wetness from salt water is not likely to be prejudicial.

6. After bathing, moderate exercise is necessary to promote the return of the heat of the body, care being taken that it is not violent nor too long continued.

7. If bathing occasion chilliness, a little stimulant or a meal should be taken soon after the bath; in the morning some hot tea or coffee, in the forenoon some warm soup. Indeed, if immersion, instead of being succeeded by a glow on the surface of

the skin, be followed by chilliness, languor or headache, bathing should by no means be persisted in.

8. During a course of sea-bathing, and even when the warm sea-water bath is used, friction with a flesh brush or coarse towel ought not to be omitted. It may enable a patient to continue the course when otherwise it would have to be given up. Worsted bathing-dresses, of open texture, are best for delicate people.

Besides the water of the sea, there are other *natural salt waters* which have a reputation both for bathing and drinking. These salt waters all owe their stimulating power, as does sea water, to the chloride of sodium (common salt), and other chlorides which they contain. Salt-water baths act as powerful stimulants to the skin, whether in the form of a natural brine, or of water in which the common salt has been dissolved.

ACID BATHS.

Dr. Helenus Scott, of Bombay, found baths acidulated with nitromuriatic acid very useful in several disorders, as in syphilis with diseases of the skin and absorbent glands, in scrofula, in obstructed menses, and in chronic disease of the liver. He also mentions a "not very uncommon disease where the mouth and throat, and indeed the whole alimentary canal become apthous, or full of little ulcers," in which, after all other remedies had failed, the patients are "restored to perfect health by using the acidulous bath, and at the same time taking internally the nitric acid very much diluted." He preferred using the acid bath moderately tepid, and of sufficient strength to produce a little pricking or smarting in the tender parts of the skin. Acid baths may be made by adding an ounce or more of nitromuriatic acid to each thirty gallons of water; or a bath with a sufficient quantity of water to cover the whole body of an adult, will, in general, be

sufficiently acidulated by a half pint of the common *nitrous* acid of the shops.

It is proper, however, to remark that whenever the nitric acid is used, either for internal or external purposes, it should never be allowed to touch any metallic substance, for it dissolves the metals, and may form injurious compounds with some of them. The acidulous bath is also very efficient for the purpose of cleanliness. It seems to cleanse the skin like soap, rapidly removing all sorts of dirt.

VAPOR BATHS.

In a vapor bath, one is not plunged into a quantity of liquid, but only receives its steam, either upon the whole or on some part of the body which requires it. After reposing in vapor for some time, a gentle moisture diffuses itself over the whole body. The skin is completely purified by various processes, in consequence of which the blood circulates freely, the body feels a voluptuous ease, and the bather almost fancies himself new born and just beginning to live. Such were the baths that the Egyptians enjoyed, and they were said either to "prevent or exterminate rheumatism, gout, catarrh and those diseases of the skin which the want of perspiration may occasion." These warm baths give to the driest and harshest skin a softness, pliancy and elasticity which no other known expedient can impart to it.*

In Russia the vapor bath is used heated to the temperature of 160° Fahr. and sometimes even higher. In this bath, and at this temperature, the bathers generally remain for half an hour, and sometimes longer; and even in the winter season they will go out of the bath into the open air without sustaining any injury whatever. They say that by the bath their strength is as much recruited as by

rest and sleep. It has been asserted by Dr. Donald Monro that the vapor bath will cure consumption when it arises from defective perspiration. The skin, though dry as parchment by the application of steam, resumes its former softness, perspiration is re-established, and the patient is cured.

Many medicines in a state of vapor produce most satisfactory effects on the system; some, indeed, in that shape appear to possess curative powers which do not belong to them in their more solid forms. Thus sulphur vapor is capable of acting in a great many cutaneous affections, in which its administration by the mouth or application in the shape of ointments or lotions would have no effect. It would surely be well worthy of encouragement to have an establishment of vapor baths at every place to which the valetudinarian resorts, in which not only steam, but the vapor of mercury, sulphur, iodine, &c., might be applied. Such baths were at one time instituted at Edinburgh, Scotland, with great benefit.

AIR-BATHS.

Cold air-baths are not much employed, although they have been recommended. Dr. Franklin was partial to what he called his *air-bath*, namely, exposing his naked body, for a certain time, to the temperature of the atmosphere. There is less danger of catching cold when the whole body is naked, than when a part is exposed and the rest is covered.

Hot air-baths have long been a favorite luxury, as well as a means of treating disease. The practice of applying heated air to the naked body was much in use among the Romans. They prepared themselves for bathing by exposing their bodies to heated air in an ante-chamber to the bath, and so much heat seems to have been applied, that had the infliction been compulsory, it would have been considered a severe punishment. These

*Savary's Letters on Egypt.

baths, which are also called Russian or Turkish baths, consist really in a succession of processes. First, the bather enters the *tepidarium*, where a marble basin occupies the centre of the room, while all around are divans for reclining and conveniences for dressing and undressing. Stripping himself, he passes into the *sudatorium*. The temperature of this room is about 120° or 150° and here he remains until perspiration is fully advanced, which may be still further encouraged by removing into a hotter apartment with a temperature varying from 150° Fahr. to 210° Fahr. In these hot rooms the perspiration streams off the body, and when sufficient perspiratory action has been allowed the bather returns to the "sudatorium," and, reclining on a marble slab, he is shampooed by an attendant. Next the whole surface is washed with hot water and soap, and the skin rubbed with a coarse towel, or horse-hair glove; lastly the process is finished by the application of cold water. This done, the bather is rubbed dry, and then indulges for half an hour in the *dolce far niente*, while he reclines on a divan, sips a cup of coffee and smokes a cigarette. The strongest Turkish bath is that in which the bather spends his time in the hottest room and finishes with the douche; the milder bath is that in which the highest temperature submitted to is about 140°, and the dive in the basin is taken in lieu of the douche. Those who take a Turkish bath for the first time should limit themselves to its mildest form.

An occasional Turkish bath is healthy and useful, since it produces an activity of the skin, which cleans the pores as well as the surface. The indolent and luxurious man, whose skin is spotlessly clean, but whose sense of propriety is such that he never indulges in a good vulgar sweat, has not, in reality, so healthy a skin as the laborer whose myriad sweat-sewers are constantly being flushed by the

hardness of his work. "A clean skin is an impossibility without perspiration; and if the necessary perspiration is not brought about by the ordinary business of life, it is advisable to encourage it by artificial means. Hence bathing is more necessary to the man of sedentary occupation, than to one who knows the daily luxury of physical exertion."*

It was in the days of ancient Rome, when Turkish baths were in their glory, that Martial wrote these famous lines:

Balna, vina, venus, corrumpunt corpora nostra;

Sed vitam faciunt, balna, vina, venus. †
evidently implying that baths formed one of the principal enjoyments of life in those luxurious times.

SOCIETY REPORTS.

BALTIMORE MEDICAL ASSOCIATION.

MEETING HELD APRIL 11TH, 1881.

JAMES A. STEUART, President, in the Chair.

RETINITIS PIGMENTOSA.—*Dr. Friedenwald* exhibited a man suffering with this affection. It began in early life and for a long time caused no great inconvenience. The first trouble noticed was night blindness. He goes about town safely in the day, but under no circumstances would he venture out at night. Both eyes are affected. Nothing has been of any service to him, and there is no hope of any improvement. No other member of his family is similarly affected, and his parents are not blood relations.

Dr. F. stated that the affection was due to proliferation of the connective

* "Baths and Bathing," London edition, p. 70.

† Wine, women, baths, against our lives combine;

But life's chief joys are women, baths, and wine.

tissue, especially the pigmentary layer, of the retina, and atrophy of the optic nerve. The field of vision is narrowed, so that the patient is in the condition of a person looking through two long tubes; he can see what is ahead of him but not what is on each side. Hence the difficulty the patients have in taking care of themselves. Such symptoms should always excite a suspicion of this disease. The source of the pigment is sometimes disease of the choroid, but this is not always the case. Sometimes cataract develops.

Dr. Frank said that *Liebreich* found a frequent relationship between the parents in these cases.

In a family of four children under *Dr. F's* observation, whose parents were first cousins, the first had retinitis pigmentosa and deaf mutism, the second and third were unaffected, the fourth, a baby, died after manifesting symptoms of developing retinitis pigmentosa and deaf mutism. In another family father and son had it, but there was no intermarriage of relations known.

Brudenel Carter has not observed this coincidence.

OPTIC NEURITIS.—This was the subject for discussion, and was opened by the reading of a paper by *Dr. Friedenwald*, which appears in the present issue of the JOURNAL.

Dr. Frank related two cases:

1. A youth of 17. In December 1877 he had an attack of malaria, which was succeeded by pain in the head and nape of neck, occasional vomiting, aching of the limbs, noises in the ears, and a staggering gait. The memory was good, *sight* and *hearing* perfect. Examination (May 22nd, 1878) revealed sluggish pupils, and well marked choked disc of both eyes. The same night he had an attack of cerebro-spinal meningitis, and although he recovered from the first attack, he lost his life in a relapse.

The 2nd case, a girl 13 years old, was in so far interesting as showing

some possible connection with the uterus. Saw her the first time May 24th, 1878; she complained of having severe headaches, lasting eight or nine hours, and vomiting during the attacks; pupils widely dilated, sight nearly perfect. There was well marked choked disc of both eyes. For the succeeding two months there were frequent spells of headache and vomiting; during the attack she would see colored rings around the light as in Glaucoma, without any intra-ocular pressure. The sight began to fail and by November it had entirely disappeared, complete atrophy having taken place.

The family physician took it to be a case of incipient tubercular meningitis (a sister having died of tuberculosis), and although there were other symptoms of brain trouble such as screaming and irregular pulse, up to this time (April 1881) no regular inflammation of the brain has taken place, nor has she yet menstruated, although all kinds of treatment have been tried to bring it on.

The last case is the most interesting one he has ever seen of this disease.

Dr. Friedenwald also related the following case: A gentleman had severe pain in the head at night; he walked the streets while his cries annoyed the neighborhood. The sight of the right eye was much impaired, whilst there was ptosis of the same eye. The vision of the left eye was only slightly impaired. There was also slight paralysis of the arm. He had had the same symptoms previously once. Loss of memory, difficult articulation, the use of the wrong words, marks of rupia on the body, were also apparent. Under the use of mercurial inunction and large doses of the iodide of potash the principal symptoms disappeared in less than three weeks, except that the left eye remained permanently affected. Over two years have elapsed and there has been no return of the disease.

BALTIMORE ACADEMY OF
MEDICINE.

SESSION OF 1880-81.

H. P. C. WILSON, M. D. President.

OÖPHORECTOMY.—*Lr. H. P. C. Wilson* reported the removal of both ovaries from a patient æt. 40, on account of profuse metrorrhagia dependent on a fibroid tumor situated in the anterior wall of the uterus (intermural). The patient had been bleeding for twelve years, for the last six or seven of which she had been confined to bed. She also suffered from agonizing dysmenorrhœa. She came under treatment last summer, with excessive anæmia, for which she was sent to Atlantic City, where she improved. On her return, Dr. W. introduced a sea-tangle tent, which expanded in a dumb-bell shape, so that all efforts to get it out failed. In these efforts, the string attached to the tent broke, and also the tent itself on using forceps. Nott's dilator was then introduced but no dilation of the internal os could be effected, nor could the upper half of the tent be extracted. A larger tent was then used, but this, expanding also in the shape of a dumb-bell, was with the greatest difficulty removed. The broken end of the tent was left in the womb, which was washed out with carbolic acid water. Menstruation returned the next day, and was less in amount than for years. She said that at the close of this menstrual period there was a severe pain and something passed from her, which she thought was the tent, but Dr. W., who examined all the secretions, did not discover it, and doubted its passage. Oöphorectomy was then proposed and accepted. An abdominal incision two and half inches long was made, through which the left ovary was felt above the brim of the pelvis well over in the iliac fossa. It was enlarged and in a state of cystic degeneration, some of which burst during the operation. Its attachments were transfixed with a carbolized silk liga-

ture and the ovary cut away without any portion of the Fallopian Tube. The right ovary could not be found until the incision being enlarged to three and a half inches, the whole hand was introduced in search of it, when it was discovered deep in the pelvis, and so bound down that it was with difficulty brought out of the abdominal incision. A double ligature was placed around the ligament of the ovary, embracing also the end of the Fallopian tube. The ovary and Fallopian tube were then cut off and the stump touched with subsulphate of iron. The abdominal incision was closed with silver wires and carbolized silk ligatures. On the third day the temperature ran up to $103\frac{1}{2}^{\circ}$ and pulse to 130. This was only transient, however, and with this exception they did not exceed 101° and 110. The operation was done the day before that on which menstruation was expected; this was unavoidable, owing to the impatience of the patient and friends. The menses appeared twelve hours after the operation, but were accompanied by very much less pain, and were of much shorter duration than before (for a year previously they had lasted three weeks). At the same time the patient was annoyed with a bad diarrhœa, which was, however, relieved by a hypodermic injection of morphia. Eight days after this the diarrhœa recurred, as the result of an enema of soapsuds and molasses; the stitches gave away and 3ij of pus were discharged from the incision (being evidently confined to the abdominal walls). The symptoms have since been all favorable.* One of the most justifiable causes for oöphorectomy is the presence of fibroid tumors (except the subperitoneal variety) that cannot be removed by operation.

*The tent was subsequently exhibited, having been seven weeks and two days in the uterine cavity. About four months after, the patient is well and the menopause fully established.

The case is interesting as showing how long foreign bodies may remain in the uterus, without serious injury, and even while a patient is passing through so dangerous an operation as oöphorectomy.

FRACTURE OF NECK OF FEMUR WITHOUT THE PATIENT BEING AWARE OF IT.—*Dr. J. Carey Thomas* reported the case of a healthy girl, aged 15, an inmate of the Children's Aid Society Institution, who, whilst on a visit to her home in the country, slipped on the ice. She immediately got up and walked about as usual. The next day she went to school, but had to limp back home, and could not walk at all after that. A country physician, who was called in, pronounced it a case of rheumatism of the hip. She was then brought to the city and was seen by himself and *Dr. Alan P. Smith*, who elicited crepitation in the neck of the femur, and was able, by extending the limb to overcome the shortening which existed. The case was unusual and interesting in the fact that the girl was not aware of the accident at the time of its occurrence.

DIPHTHERIA AND FILTH.—*Dr. John Morris* reported the occurrence of six cases of diphtheria in one house. Five were attacked on the same day, the sixth four days afterwards. All presented a serious aspect from the beginning, and three died on the fourth and fifth days of paralysis of the heart due to the violence of the poison. The other three are likely to recover. The circumstances suggesting a local cause, an examination was made by the Health Department by direction of *Dr. Steuart*, Health Commissioner, which revealed a shocking sanitary condition of the premises. The yard was small, the privy being but twelve feet from the hydrant. The contents of the privy were running over into the yard and alley-way. The family cooked and lived in the basement; upon taking up the board floor of this, the ground was found covered

with faecal matter. The cellar was stored with old lumber, much of which was rotten and decaying—the remains, evidently, of some old building intended for use as fuel. A goat was tied near the back door, and there was a large pigeon house, containing twenty to thirty pigeons, and in a filthy condition, just over the door. The family were dirty and offensive-looking, and the odor on entering the house was horrible. A child, who subsequently played with the goat, died of diphtheria. The yellow-fever epidemic in Norfolk in 1855 originated from rotten shingles.

FATAL POISONING FROM CARBOLIC ACID. *Dr. Chew* reported the case of a druggist who took by mistake half an ounce of pure carbolic acid. A stomach-pump and emetics were resorted to about a quarter of an hour after the accident, but there was no vomiting. The patient was pulseless and comatose for several hours, then rallied and lived five days. Symptoms of blood-poisoning were present. The patient died from asthenia. The urine (examined on the second day) presented nothing abnormal. Swallowing was possible on the day of death, although accompanied with pain. Three weeks after death the body, which had been placed in a vault, was in a state of complete preservation, without the least odor or sign of decomposition.

RUPTURE OF MEMBRANA TYMPANI BY SLIGHT BLOW ON SIDE OF FACE.—*Dr. Chisolm* reported a case of this nature occurring in a gentleman who received a blow on the ear. Persistent buzzing in the ear, with complete loss of hearing followed. It was the third case of the accident resulting from slight causes, that had come under his care. In the two others the injury was inflicted in one by a friend closing his hands over the ears of the patient, and in the other by a slight blow on the side of the head with the flat of a shovel.

Dr. Samuel Theobald thought there was probably some abnormality of the membrane in these cases. As a rule such an accident ought not to produce deafness. Probably an old otitis media had previously existed, which had left the tympanum diseased and consequently had caused some deafness. An ordinary incision in the membrana tympani will heal in twenty-four hours.

Dr. Chisolm replied that the ear was perfectly healthy before in each case. The ossicles were displaced and perhaps the injury had extended further inward by the foot of the stirrup being driven through the foramen ovale.

RECOVERY FROM LARYNGEAL DIPHTHERIA.—*Dr. D. I. McKew* reported the case of a boy *æt.* 15, who began to complain of his throat, fever, &c; in two days this had developed into one of the worst cases of faucial and nasal diphtheria he had ever seen. Shortly after the breathing became difficult. On the third day he was purple from obstruction in the larynx. Death was thought to be certain, and tracheotomy suggested itself, but *Dr. M.* was deterred from its use by the bad results which he had seen from it. At his visit next morning he was surprised to find great improvement in the breathing. The membrane gradually disappeared and the patient recovered. The case teaches that patients may recover in this affection even in the apparently most hopeless cases. If he had been tracheotomized he would certainly have died. He thought if we trusted more to nature and waited longer, we would see more recoveries, and hence we would not have to submit to the bad statistics we now exhibit.

TWIN MONSTROSITY.—*Dr. Wm. Lee* exhibited a specimen of twin *fœtuses* obtained by *Dr. Whitridge* from a patient who had aborted at about the third month, probably in consequence of something she had taken. The twins were attached to each other by their sides. One had but one upper

and one lower extremity, these parts being deficient on the side of the attachment. This *fœtus* also exhibited a sac, which occupied the site of junction. Subsequent dissection showed that this sac contained the intestines of that *fœtus*, which was not fully developed; also that the extent of attachment was one inch and occupied the situation of the false ribs and pelvis.

LEMON JUICE IN DIPHTHERIA.—*Dr. Steuart* called attention to this article, which he had been using for two years past, in recent cases of diphtheria. He employs it locally, cutting a lemon in two and mopping out the throat with a mop made of muslin. It removes the membrane better than anything he has employed. He continues the use of it as long as there is any membrane apparent, but has rarely had to apply it more than three or four times at most. He has not tried it in any malignant case. Several of his medical friends have tried it with equally satisfactory results.

REVIEWS, BOOKS AND PAMPHLETS.

A Treatise on the Diseases of the Nervous System. By WM. A. HAMMOND, M. D. Seventh edition, re-written, enlarged and improved. New York, D. Appleton & Co. 8 vo. Cloth. Pp. 929.

The first edition of this work appeared in 1871; subsequently a new edition appeared annually but without essential change until 1876, when it was entirely remodeled and greatly enlarged. After a lapse of five years the work appears again with extensive additions and alterations, among which are a considerable amplification of the chapter on cerebral congestion, the introduction of a chapter on the new disease, myxœdema, of others on syphilis of the brain, &c., and on the symptomatology of cerebral and cerebellar lesions, and a new section on diseases of the sympathetic nervous system. The author acknowledges also having made liberal draughts upon Nothnagel's "Topical Diagnosis of Brain Diseases,"

and the new matter added to the French edition by the translator Labadie-Lagrave. The chapters on insanity have been omitted as the author is preparing a special treatise upon this subject; notwithstanding, there is an increase over the last edition of about forty pages.

We learn that an Italian translation is now going through the press at Naples.

This work shows the genius and originality which have characterized its gifted author in all of his literary contributions. Although it was the pioneer in America in this field, it entered into competition from the first with the celebrated works of European neurologists. Abroad it is esteemed even more than at home. The French received it with enthusiasm, and in England it is quoted as the highest authority upon the subject of which it treats.

The simplicity and directness of style—features which the best of our American writers seem to excel in—are by no means its least recommendations. We may well say with a French reviewer that the work marks an era in the progress of medical science.

American Nervousness: Its Causes and Consequences. A Supplement to Nervous Exhaustion (Neurasthenia.) By GEO. M. BEARD, A. M., M. D., New York. G. P. Putnam's Sons, 1881 8vo. Pp. 352.

The contributions of Dr. Beard to the literature of nervous affections are well known and highly appreciated. The subjects discussed in the present volume he informs us, have occupied his thoughts from the time when he first began to think. Many of the views here set forth were given in a lecture delivered before the Medical and Surgical Society of this city. The following headings will convey some idea of the character of the work, which is designed for popular as well as professional reading:

1. Nervousness (deficiency of nerve force) has developed mainly within the nineteenth century; it is not simple excess of emotion, nor is it organic disease.

2. Its chief cause is *modern civilization*. Secondary causes are climate, institutions, personal habits, &c., but they alone are without power to produce it.

3. Various functional nervous diseases

are evolved out of this nervousness, the sign and type of which is neurasthenia.

4. The origin and greater prevalence of nervousness in America is attributed to various causes, as dryness of the air, extremes of heat and cold, civil and religious liberty, and the great mental activity of our people.

5. American nervousness is indicated by the nervous diathesis, susceptibility to stimulants and narcotics, increase of nervous diseases, as hay-fever, neuralgia, nervous dyspepsia, &c., and of those not exclusively nervous, as Bright's disease, diabetes, &c., &c. Also in many other ways.

6. Longevity has increased *pari passu* with this nervousness.

7. The evil tends to correct itself by time and improvement in our social condition.

The subjects treated of in this volume undoubtedly have not received the attention they deserved, and we owe it to Dr. Beard for persistently forcing them upon our notice until their importance is beginning to be duly appreciated. We are also indebted to him for presenting us with a charmingly written book that will doubtless have, as it deserves, a host of readers.

A Practical Treatise on Impotence, Sterility and Allied Disorders of the Male Sexual Organs. By S. W. GROSS, A. M., M. D. Philadelphia, 1881. 8vo. Pp. 174. H. C. Lea's Son & Co.

The author teaches that impotence and spermatorrhœa depend upon reflex disturbances of the genito-spinal centre, and are almost invariably induced or maintained by appreciable lesions of the prostatic urethra. In 149 of 153 cases noted, impotence was "atonic," i. e., arose from diminished or abolished reflex excitability of the genito-spinal centre. Its most common cause is masturbation, which is "just as sure to result in urethritis and stricture as is gleet." The urethra should always be explored in these cases with the bulbous bougie for stricture.

The author has never known insanity to follow onanism, and agrees with Paget that it is not more hurtful than sexual intercourse practiced with the

same frequency. Of local measures for the relief of the prostatic trouble the steel sound is the most useful. Often it will be found necessary to apply the nitrate of silver to the part, which the author prefers to do in solution. In spermatorrhœa, the steel sound, bromide and atropia, are especially adapted to cases of nocturnal emissions, whilst electricity, ergot and strychnia are the most reliable agents in diurnal pollutions. In sterility, the husband is said to be at fault in at least one instance in every six. The practical character of the work is conspicuous throughout, and it cannot fail to prove very helpful to every physician in active practice.

Atlas of Human Anatomy. Containing 180 large plates arranged according to Drs. Oesterreicher & Erdl, from their original designs from nature, and those of the greatest anatomists of modern times, viz: Weisse, Scarpa, Soemmering, Langebeck, Reil, Meckel, and others, with full and explanatory texts by J. A. JEANÇON, M. D. A. E. Wilde & Co., Cincinnati, Ohio.

Parts 17 to 42 of this great work, the outcome of Western pluck and enterprise, have been received, and show the same excellence as the earlier numbers, which we took occasion to mention in our two former notices of it. The possession of such a work is a great desideratum; to the teacher and student, in imparting and receiving information upon a subject that forms the basis of medical education, and to the physician in active practice, in enabling him at any moment in emergencies to refresh his mind upon the situation and relation of the tissues. The publishers are to be congratulated upon their production of a work of such excellence and magnitude, and Cincinnati is to be congratulated on the possession of such enterprising publishers.

Part 45 completes the publication, which will contain altogether over 1,000 illustrations.

Atlas of Gynecology and Obstetrics.

Edited by DR. A. MARTIN, Professor of Gynecology at the University of Berlin. Containing 475 black and 37 colored illustrations. A. E. Wilde &

Co., Publishers, Cincinnati, Ohio. Folio Parts 1 to 4. \$1.00 per Part.

The publishers have been so much encouraged by the great success of their "Atlas of Human Anatomy" that they have been induced to publish another similar work, the aim of which is to supply a series of plates completely illustrating the important subjects of obstetrics and gynecology. The plates are taken from original designs of Virchow, Naegele, Schroeder, Rokitansky, Coste, Hodge, and eighty-five other leading writers, and also from Maygrier's "Nouvelles Demonstrations D'Accouchements." There are to be fifteen parts in all, which it is expected will be completed by June next. The work is of the same character, as to execution, as the "Anatomical Atlas," and it will undoubtedly be a great help to the student and physician in the elucidation of the pathology and treatment of the obstetrical and gynecological affections of women.

Habitual Mouth Breathing. Its Causes, Effects and Treatment. By CLINTON WAGNER, M. D. G. P. Putnam's Sons, N. Y., 8 vo. Pp. 52.

This monograph followed by the report of a discussion upon it, deals with the subject of Habitual Mouth Breathing and the long train of evil consequences which depend upon it. Everything points to the nostrils as the natural channels of respiration in man. The use of the mouth for this purpose results from carelessness, ignorance, or a local nasal or mouth trouble. The effects of the habit when confirmed, in narrowing the nasal passages and in altering the facial expression is illustrated. An interesting and useful little work.

Index-Catalogue of the Library of the Surgeon General's Office, U. S. A.,

Vol. II of this great work, a monument of American industry, ingenuity, enterprise and liberality, is before us. It extends from Berlioz to Cholas, contains 990 pages, 12,459 author-titles (representing 4,934 volumes and 9,810 pamphlets), 11,550 subject-titles of separate books and pamphlets, and 37,310 titles of articles in periodicals.

Aphorisms in Fracture. By R. O. COWLING, A. M., M. D., Louisville, Ky., 1881. 12 mo. Pp. 70.

Domestic Hygiene. By F. DONALDSON, M. D., Baltimore, 1881. 8 vo Pp. 40.

Studies on the Laws of Life. Reviews of various Essays. By Dr. NATHAN ALLEN, &c., Lowell, Mass. 8 vo. Pp. 32.

University of City of New York. Medical Department. Annual Announcement and Catalogue. Session 1881-82, New York, 1881. 8 vo. Pp. 24.

University of Maryland. Seventy-fifth Annual Circular of the School of Medicine. Session 1881-82. Baltimore. 1881. 8 vo. Pp. 24.

List of Periodicals taken by the Libraries of Baltimore. 8 vo. Pp. 12. (Published by Johns Hopkins University).

Johns Hopkins University, Baltimore. Studies from the Biological Laboratory, vol. 11, No. 1. June 1881.

Nasal Stenosis. By J. O. ROE, M. D. New York, 1881. 8vo. Pp. 32.

Third Annual Announcement of the College of Physicians and Surgeons of St. Joseph, Mo. St. Joseph, 1881. 8vo. Pp. 16.

The Pathology and Surgical Treatment of Hypertrophic Nasal Catarrh. By WM. C. JARVIS, M. D. New York, 1881. 8vo. Pp. 12.

The Quality of Mental Operations Debased by the Use of Alcohol. By T. L. WRIGHT, M. D. Bellefontaine, Ohio. 8vo. Pp. 13.

Ether Death: A Personal Experience in Four Cases, &c. By JOHN B. ROBERTS, A. M., M. D. Philadelphia. 8vo. Pp. 12.

The Arkansas Doctor: A Monthly Journal of Practical Medicine. Vol. 1 No. 1. June, 1881. L. J. COLLINS, M. D., Editor and Proprietor. Harrisburg, Ark. 8vo.

The American "Medical College Association." Fifth Annual Meeting held at Richmond, &c. Detroit. 1881. 8vo. Pp. 8.

The Microscope: An Illustrated Bi-Monthly Journal. Ann Arbor, Michigan. Edited and published by CHAS. H. STOWELL, M. D., and LOUISA REED STOWELL, M. S. Detroit. 1881. 8vo.

The Sanitary News. Vol. 1, No 1. April, 1881. R. C. L. REED, M. D., and C. A. L. REED, M. D., Editors and Publishers. Cincinnati. 8vo.

Trans. Amer. Dermatological Association. Philadelphia, 1881. 8vo. Pp. 84.

Transactions of the American Dermatological Association, at the Fourth Annual Meeting, 1880. 8 vo. Pp. 85.

Catalogue of Wm. Wood & Co. For the delegates to the International Medical Congress.

Tubercular Laryngitis or Laryngeal Phthisis. A paper read before the Ann Arbor Medical and Surgical Society. By C. J. LUNDY, M. D.

Fortieth Annual Announcement of the St. Louis Medical College. Session 1881-82.

Are all Anæsthetics Dangerous Which Contain Chlorine or Iodine? By E. T. REICHERT, M. D. Reprint.

Ohio Medical Journal: The Journal of the Ohio State Medical Society. Vol. 1, No. 1. July, 1881.

May Iodide of Potassium Excite Bright's Disease? By I. EDMONDSON ATKINSON, M. D. 8 vo. Pp. 14.

On "Kerion Celsi," a variety of Tinea Tonsurans. By I. EDMONDSON ATKINSON, M. D. 8 vo. Pp. 20.

Deaths:—Heschl, of Vienna, aged 57; Rolleston, of Oxford, aged 51; Littré, of Paris, aged 80; Mandl, of Paris, aged 69; Maurice Raynaud, of Paris, aged —. The last was to have delivered the French address at the International Medical Congress.

A refrigerator apparatus has been adopted at the morgue in Paris, by which bodies can be preserved for a considerable time for identification.

EDITORIAL.

INTERESTING LETTER FROM THE CELEBRATED DR. WM. CULLEN TO THE FIRST PRESIDENT OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND. —A most interesting and valuable document has just come into the possession of the Library of the Medical and Chirurgical Faculty, the nature of which is described in the heading of this article. This letter is dated 1773; Cullen was then 61 years of age and at the zenith of his fame and mental powers. "No man," says Pettigrew, "can be said to have ever attained a higher position in the medical world than did Dr. William Cullen." At the time of writing, he was Professor of Physic in the University of Edinburgh. As he speaks of his wealth, consisting only in a large family, it may be interesting to state that he had eleven children, and that at the time of his death (1790) he did not not leave them a support. Cullen was a prolific writer, and his work were very popular and went through many editions, besides being translated into various languages. His work on "Nosology" (1769) and his "First Lines of the Practice of Physic" (4 vols., 8vo., 1777) were the most popular medical books of their day. He was a distinguished chemist and lectured upon this branch for many years. He abandoned the use of Latin in lecturing. He overthrew the influence of Boerhaave, until then the supreme authority in medical opinion. He regarded physiology as the foundation of medical practice. He paid great attention to the study of the nervous system, and inculcated the great importance of observing the natural history of diseases, and of discriminating between the phenomena due to the disease *per se* and the effects of remedies. The boldness of his opinions, whilst it added greatly to his fame, created much opposition and adverse criticism. His distinguishing characteristics were his equanimity of temper, his inexhaustible patience, his modesty, and his great regard for truth. He was the friend as well as the teacher of his students, by whom he was deeply loved and venerated. The engraving of him at the Library was taken from a painting made in 1777 and represents him as in

the delivery of a lecture. The letter loses none of its interest by the personal narration at the close, which, among other things, indicates a very charming spirit of contentment and resignation to what many might have regarded as disproportionate results of such great labors and talents.

Besides the intrinsic value of the letter of so great a man, its worth to physicians in Maryland is much enhanced by the fact that it is addressed to one who was the first President of the Medical and Chirurgical Faculty of Maryland, and, we here learn, one of Dr. Cullen's first pupils. Dr. Upton Scot, of Annapolis, was elected President of the Faculty in June, 1799, and held the office for two years, when he resigned and was succeeded by Dr. Philip Thomas.

Nothing further is known of the Mr. Birnie, who was the occasion of the letter.

The letter has been suitably framed so that it can be read entire.

My dear Sir

Tho I hope I have never been wanting in attachment to my pupils I must own that my first are always first in my mind & I have always been pleased to hear of you & of your prosperity. If I could hold a correspondence with anybody I should have been glad to hold one with you but I cannot pretend to it & I write now upon a particular occasion. I have had Mr. Birnie for a pupil this winter & I find he is a near relation of yours & is to be very entirely directed in his conduct by you. I have the pleasure to tell you that he is very sober in his manners & diligent in his studies & as he has very good parts I think you may depend upon his proficiency. He has already done a great deal but I find him at present a little pushd. Since he came here he seems to have found out that he has more still to learn than he thought of & he does us the honour to think he may acquire what he wants from us. He therefore wishes to have your approbation for passing another winter here. I have promised him to give you my opinion upon the subject but I believe it is not very necessary. You know very well that the study of physic is not soon to be completed. I myself know that I have been at it more than forty years & am not done yet. I know that our

pupils generally stay too short a time with us & therefore go away with very raw and indigested notions. I think most of them offer themselves to the world too soon & a little more time spent in study would be fully compensated by more certain & quick success afterwards. I submit these reflexions to your good judgement & only add further that my own interest has no share in this matter for I have always been fonder of one sensible pupil than of three tees & I think we may have credit by Mr. Birnie but as our regulations stand at present he cannot go out as our pupil that is have a degree from us before June 1774. When I am taking this occasion of writing I flatter myself that you will be pleased to hear some account of myself, & I shall give it shortly. I am growing old but have never lain one day in bed since I remember. I have in short as good health as my great fatigue can possibly admit of. I have had as much success in all my employments & am as happy as I deserve. I am rich only in a large family but I want not otherwise what is necessary. It will be an addition to know that you are well & happy in every respect, & that you believe me to be with very great regard

D^r. Sir

your very faithful and
obedient servant—

William Cullen

Edin^r. 30th April

1773

On the back is the direction :

To Upton Scot Esqr

WANT OF LIBERALITY IN MARYLAND TO INSTITUTIONS OF LEARNING.—Whatever credit we can claim for ourselves as Marylanders, we certainly cannot maintain that we are liberal to our institutions of learning. We ought to hang down our heads in abject shame when we reflect upon our shortcomings in this regard. Grant that we have been poorer than some other communities in the country, we certainly have been far from beggars, and the plea of poverty cannot be made. Under the old regime, in the days of slavery, when each master of a plantation exercised an authority over his household and numerous dependents but little short of feudalism,

what a vast amount of money was squandered in lavish and unnecessary entertainments, in gaming and horse-racing, in dissipation, in travel! What proportion of all this wealth went to build up the colleges? Among the merchants, the mechanics, the professional men of those days, who acquired fortunes, great and small, how many gave any portion of them to institutions of learning? Have matters changed much for the better since the war? Do we hear of any wealthy persons now endowing the colleges? The single sublime exception of a few years ago,* whilst it perhaps creates at a distance a false impression as to our liberality, but serves at home to heighten the contrast of general penuriousness. Of all the other higher schools of learning, institutions that have arisen from time to time, during the last hundred years in Maryland, many of which are sanctioned by time and by associations and ties that ought not to be ignored, not one, so far as the writer knows, has ever been endowed. Their history evinces consequently a constant effort to maintain themselves and a struggle to do that with a meagre revenue which other institutions were doing with ample means. St. John's College, Annapolis, furnishes an illustration which is representative. Founded in 1789, and hence one of the oldest of American colleges, and with an honorable record and a long list of eminent alumni, yet it seems to be to-day doubtful whether it will live or die. We inevitably draw a contrast between this condition of things and that prevailing in some other States where the people take a pride and feel it to be a duty to support liberally their educational establishments, and where it is an every day occurrence for men of wealth to bequeath large sums of money to the institutions from which they graduated. As a consequence of such a generous and substantial support endowments have accumulated, which in some cases are enormous, and which enable the corporations owning them to develop continually their resources and to meet every demand for further improvement as soon as it arises.

* The Johns Hopkins University.

Whilst those whom this article will reach feel or should feel a deep interest in all that relates to education, whether special or general, and whilst they will be capable of exerting a potent influence in connection with the support of our institutions of learning generally, yet their interest will or should be especially manifested in connection with our schools of medicine. Our duty to foster and seek to elevate them is clear, and for this purpose each one should use such influence as he possesses with judgment and with a charitable and forbearing spirit. Let no one suppose he has no influence in this connection; a word fitly spoken, an opinion disinterestedly given, a manly sympathy for what is good and a judicious condemnation of what is reprehensible, will have greater weight than any of us could imagine. Above all let us remember that fault finding and abuse are not always the best ways of correcting evils. And lastly, if we wish our home schools to keep abreast of the age in progress and improvement, if we wish to see them adopt the reforms that public opinion is daily more and more rendering essential to institutions of the highest order, we must provide them with the necessary means; in other words we must *endow* them, for it is only by endowment that they will be able to meet the strain which inevitably, and not long hence, will come upon them.

THE PRESIDENT.—The most conspicuous feature in connection with the case of the President is the absence of accurate knowledge concerning the nature and extent of the injury inflicted. The course taken by the ball and its present location are matters of which we are yet profoundly ignorant. In view of the absence of symptoms pointing to various important structures,—the liver, peritoneum, pleura, intestines, etc., we are perhaps justified in supposing that no damage has been done to them. This negative evidence, together with the known contact of the ball with the outer surface of the rib, and the resiliency of the latter, have led to two theories: One, proposed by Dr. Weisse, of New York, that the ball was deflected downwards (by the natural *rise* in the rib on being forced inwards) into the pelvis, where it

struck the sacral plexus and thus caused the pain in the feet which was so difficult of explanation; the other, emanating from the English journals, that it either lies buried in the spinal muscles near the point of entrance, or else following the outer surface of the rib is somewhere in the anterior abdominal parietes. At present the symptoms of suppurative inflammation and fever continue, and the treatment would seem to be limited to maintaining a free vent for the discharge of pus, spiculæ of bone, fragments of clothing, &c., and supporting the patient's strength, hoping that the ball may in time give such evidence of its existence that attempts to remove it may be made with safety. As for the result, we may repeat what was said a day or two ago by one of our surgeons; how can we form any intelligent prognosis in regard to a case of the nature of which we are so profoundly ignorant?

As this article goes to press, a statement is published as coming from Dr. Hamilton, to the effect that a circumscribed hardness, tender on pressure, has been discovered in the right iliac fossa, pressure upon which causes the pus to flow from the orifice of the wound. This is supposed to indicate the position of the ball, and gives confirmation to Dr. Weisse's hypothesis.

MISCELLANY.

PSEUDO-HERMAPHRODITE.—M. Magitot presented a patient to the *Société de Chirurgie*, aged 41. At 13 she had an apparent menstrual flow, twice repeated at intervals of three months. At 15-16 the breasts developed and she showed a decided liking for boys. At 18 she married but coitus was never complete. In 1871 her husband died, and from this time she experienced a great desire for women and had frequent natural connection with them. This person was 5 feet 10 inches in height, had rather short hair, a well developed beard, a masculine neck, but feminine voice. The breasts were large and soft. There was a real penis, the size of a boy's of

12, imperforate, doubling in size on erection. In each apparent labium majus was an atrophied testicle. There were no spermatozoa in the seminal fluid. Below the penis was an infundibulum (from which ejaculation took place) and urethral orifice. All present regarded it as a male with hypospadias.—*Gaz. Hebdom., June 17th.*

DR. BLISS, it seems, has been carrying things with a high hand in Washington. Although himself only casually called in, he dismissed the physician who first reached the President (Dr. Townshend), and when the regular attendant (Dr. Baxter) arrived refused to admit him to the sick-room. He also notified Drs. Lincoln and Wales, two of the consulting physicians, that their services were no longer needed.

ARTIFICIAL RESPIRATION IN STILL-BIRTH.—Dr. Howard directs to receive the child in the left hand on its back, with head hanging over wrist. Compress the now prominent thorax with the right thoroughly for three seconds, then suddenly let go. Repeat ten or twelve times a minute. In 1-2 minutes if natural respiration do not occur, let an assistant cleanse and dry infant's mouth, close its nostrils with one hand, hook forward tongue with the other, the middle or ring finger of which meanwhile presses firmly back the larynx, and insufflate (mouth to mouth) child's lungs with fresh air. These may be alternated. Divide funis in five minutes. This method is easier than any other, secures any advantages to be derived from the maternal circulation, and allows other measures to be simultaneously employed.—*Brit. Med. Journ. June 25th.*

A SINGULAR ATTEMPT AT SUICIDE.—*Le Siecle Medical* relates a case of a man, who after a difficulty with his wife, drove a poignard, four inches long, into the top of his head with a hammer. Failing, to his surprise, to accomplish his object, he was obliged

to call a physician. Two physicians tugged in vain at the hilt of the poignard, and were finally forced to resort to mechanical means. As the blade suddenly escaped, the man fell to the ground, but jumping up immediately walked off with a "merci." As a matter of precaution he was taken to the St. Louis Hospital, but left in eight days without any sign of inflammation or paralysis.—*L'Union Medicale, June 9th.*

QUININE AMAUROSIS.—The characteristic features are: 1. Total blindness after taking a large quantity of quinine; 2. Pallor of the optic disks; 3. Marked diminution of the retinal blood-vessels, in number as well as in size; 4. Contraction of the field of vision.

The total blindness is only temporary. Relapses seem to occur and from comparatively insignificant doses. Horizontal position seems to be beneficial.—*Knapp, Archives of Ophthalmol., June.*

UPON the occasion of a recent report of a case of death from the external use of carbolic acid, at the Clinical Society of London, the President, Mr. Lister, said that he realized the danger of employing this agent, and in consequence had discontinued its use entirely and had substituted the oil of eucalyptus. In view of these statements, we may well turn our attention to a new antiseptic, which comes to us very highly recommended from the West—*Listerine*. Whilst it is said to possess all the antiseptic qualities of the carbolic acid, it is also said to be unirritating, entirely free from risk, and devoid of unpleasant odor. Nothing is more needed at this day than such an article, and if *Listerine* is found to be what we have the very highest testimony for believing that it is, a great discovery has been made. Meanwhile, we should give it an impartial trial. See advt.

LOCAL NOTES.—The Baltimore Academy Prize is open to competition of all Maryland physicians.—A number of the dentists of this city have received communications from the "Wisconsin Dental College, Delavan, Wisconsin," offering to sell them the degree of D. D. S., for \$12.—The Baltimore Dental College has secured new and very elegant quarters at the southeast corner of Eutaw and Franklin streets.—The Johns Hopkins University plan of awarding scholarships for special studies has been adopted in Owens College, Manchester, England. —The library of the Medical and Chirurgical Faculty is open from 11 A. M. to 7 P. M., during which hours the librarian or his assistant are always in attendance, and books and journals are received or delivered. The door of the hall will be locked except during the aforesaid time. As this arrangement affords perfect security to the property, it is to be hoped that those gentlemen who have hitherto declined, on account of the lack of security, to aid this important work, will now show their sincerity by liberal contributions.—A movement is on foot looking to the establishment of another medical school in Baltimore. A well-known college organizer is at the head of it, and it is said a nine months term is to be an essential feature.—Dr. G. Ellis Porter, of Lonaconing, Md., is in Europe and will attend the International Medical Congress, as a delegate from the Faculty. —Dr. John VanBibber will deliver a lecture in the next course at the Peabody Institute on the "*Human Brain and its Relations to the Mind.*"

MEDICAL ITEMS.

It is related of Skoda that, being summoned on one occasion to see the Empress, he was refused admission on account of his shabby coat; "if Her Majesty desires to see my coat," said

he, "I will go home, but if she desires to see me she will see me as I am." He was admitted.—There were 504 medical students in the University of Berlin last winter.—An eminent trans-Atlantic physician closes a letter to a friend in America with the prediction: "Medicine of the twentieth century—Sanitary Science and Surgery."—The "Builder" asserts that there is not one Italian city that is properly sewered, drained and scavenged.—Dr. W. J. Eams cured an obstinate case of molluscum with one-grain sugar-coated pills of iodoform given three times daily.—*Brit. Med. Journ.*—The Michigan Legislature has passed an act establishing a chair of eclectic medicine in the State University.—All science that is now known is but the organization of phenomena of nature that men have thought to be too trifling for the solemn attention of the human mind.—*Beard.*—In spermatorrhœa, 30 grs. bromide of potass., along with about gr. x of the fl. ext. of gelsemium, every 8 hours, and gr. 1-60 sulph. atropia on retiring, are worth all the other internal remedies combined.—*S. W. Gross.*—A medical paper in Leipsic has been fined heavily for publishing a lecture in which homœopathy was denounced as quackery and swindling.—Hay fever is being cured in France by nasal irrigations (by means of the douche) of a solution of quinine, 1 part in 750 of water.—To restore the scale on thermometers, when the pigment is worn out, paint with an alcoholic solution of any aniline color.—*Can da Med. Journ.*—Dr. Nettleclift, Supt. of the Chelsea Infirmary, has never seen any application act so promptly in the relief of irritable and inflamed piles as ext. hamamelis virginica.—Dr. Hammond has been guilty of a gross violation of ethics if he expressed himself in regard to the President's physicians, as he is reported to have done by a New York paper.—See Alumni Prize, page xvii.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

HYPERTROPHY AND PROLAPUS OF TONGUE—REMOVAL; RECOVERY.

BY L. MC LANE TIFFANY, M. D.,

Prof. of Surgery, University of Maryland.

The following case is believed to be of rarity and interest sufficient to justify its being placed on record: A. B., negro, aged 5 years, native of Virginia, was brought for treatment by his mother, from whom was obtained the following history:

A. B. presented no peculiarities at birth; at all events, none were noticed. At the age of one month, a sudden swelling occurred on the left side of the tongue, near the tip; this opened in a few days and discharged more than a teaspoonful of pus. Since this time the tongue has always protruded, at first a little, subsequently more. The child had no difficulty in sucking. The tongue has been continually out of the mouth since A. B. attained the age of 1 year. The power of eating solids and semi-solids was gradually lost, keeping pace with the growth of

the tongue. The family history presents no points of interest. There are two other children beside A. B., both healthy; the parents are field laborers, the mother rather lacking in intelligence; no history of hereditary disease.

The accompanying cut well illustrates the present appearance of A. B. The tongue continually protrudes; it can be retracted a distance of one inch only; the tip cannot be raised by the lingual muscles, but rests always against the chin. The upper surface is dry, fissured, and covered with a thick coating of epithelium, which can be scraped off without much force. The under surface resting against the edge of the lower jaw is marked by a line of ulceration, posterior to which the openings to Wharton's ducts are seen. The lips rest against the surface of the tumor; breathing takes place by the nose. The four lower incisor teeth are wanting; at their site the jaw presents a sharpish edge directed forward, the weight of the tumor having changed the direction of the symphysis at the chin from nearly vertical to horizontal. The lower canines are displaced outwards and forwards. The

upper incisors are directed forwards horizontally, the usually posterior surfaces resting upon the tongue. The upper canines look outwards and forwards. The molars can be brought together, and in the photograph are so. Fluids only are swallowed, being introduced by pulling outwards one angle of the mouth. Saliva continually dribbles from the lower surface of the tongue and chin. Along the upper convex surface of the tongue the length is $2\frac{1}{2}$ inches from teeth to tip, along the lower surface 2 inches.

tongue being in front of the foramen cæcum. The operation was absolutely without loss of blood, except as regards the left ranine, which required a little retouching with the hot knife. The mouth was kept clean by frequent washing with myrrh and water, and the patient allowed to go home on the tenth day, by which time the stump was healing favorably, had greatly diminished in size, and was very movable. The patient was eating food of all kinds, beef, potatoes, etc., hitherto unknown luxuries. The re-



After removal of tongue, the aperture, in which it rested between the jaws, was 2 by $1\frac{1}{2}$ inches. No distinct tumor was present to the touch; the mass appeared to be an overgrowth of the forepart of the tongue. The child communicated with his mother by signs, having never spoken.

The tongue was removed by Paquelin's thermo-cautery under chloroform, section being made from within the upper incisors to just in front of the openings of Wharton's ducts, the line of section upon the dorsum of the

moved tongue was much harder and more resistant than the normal organ, showing on microscopic examination connective tissue hyperplasia, while in many places the muscular fibres had lost their striæ and become granular.

The affection in question, hypertrophy of tongue with prolapsus, is well described by writers on surgery, especially Crosse, of Norwich, and Lassus. It may be present at birth, and in almost all recorded cases has been first noticed in very early life.

Absence of pain has been always remarkable, the patient seeking relief on account of inconvenience and unsightly appearance of the protruding mass. Liston records a case where an individual bore his trouble until the age of 19 years (Cyc. of Anat. and Phys., vol. iv., pt. 2, page 1158), and Mirault one, until the age of 34 years (Holmes, vol. 3, p. 898). In non-congenital cases, chronic inflammation is charged with its causation; salivation also; and Dr. Wells, of Columbia (Cyc. of Anat. and Phys., loc. cit.), mentions a case which commenced by an attack of glossitis in infancy, bearing, therefore, some resemblance to the case now recorded. It is worthy of remark, however, that a tongue may be enlarged and yet escape the notice of attendants until protrusion beyond the gums is constant; the weight of authority is greatly in favor of congenital malformation, excluding instances of vascular tumor-nævus.

When nævus is present, periodical increase and decrease have been observed (Liston's case), but generally the progress of the deformity is continuously to increase.

Several cases in one family have not been recorded, so that hereditary predisposition need not be considered among probable causes.

Syphilis, the many-headed, seems not to be recognized as a cause, yet Bryant (Pract. of Surg., p. 376) records two cases, one of which was relieved by small doses of mercury, while the other was cured by potassic iodide within a week. As no history of parental syphilis could be obtained, and hospital residence was very limited in my case, specific treatment was not instituted. Leeches, lotions, bandages exercising compression, etc., are strongly advised by Lassus, and Crosse (loc. cit.) records a successful result by means of such treatment. The weight of authority, however, is in favor either of removing the entire prolapsed portion, or else of excising a

wedge-shaped piece in front, the lateral flaps being united by suture in the middle line. The latter of these methods is probably preferable, yet my patient not being able to remain long under observation the more simple plan, amputation, was adopted.

The facility with which Paquelin's cautery performed its work, both as a dividing and searing instrument, was most excellent, and deserves special mention.

OPTIC NEURITIS.

BY A. FRIEDENWALD, M. D.,

Professor of Diseases of the Eye and Ear, College of Physicians and Surgeons, Baltimore.

(Read before the Baltimore Medical Association, April 11th, 1881.)

(Concluded).

Experience has taught that neither the seat of the tumor nor its peculiar nature has any special influence in the development of the neuritis. Tumors of the cerebellum, tumors situated in the cerebral convexity, tumors found at the base of the brain, all produce the neuritis alike. In the last instance, the optic nerve may be subjected to direct pressure, and consequently undergo atrophy, before the disease has reached a sufficient development to cause increased pressure in the cranial cavity. The nature of the tumors presents quite a varied character. Sarcoma, cysto- and myxosarcoma, carcinoma, glioma situated either in the brain or in the meninges, syphilitic gummata, cheesy tubercles, cysticercus, echinococcus, tumors of various kinds growing from the bones of the skull, all produce the disease in the same manner, so soon as the intra-cranial pressure is permanently increased.

The presence of intra-cranial pressure in these cases is of course indicated by other very prominent symptoms, viz: vertigo, vomiting, severe and persistent pain in the head, syncope,

epileptiform attacks, and coma. The amount of pressure may not be so great as to produce these symptoms in their fullest intensity, though fully sufficient to establish the picture of the choked disk. The intra-cranial pressure oftentimes in these cases increases very gradually, and during this stage the head symptoms assume a much milder character; there may only be noticed some headache, mental confusion, obtuseness of the mind, failing memory, upon which we can rely to attribute the neuritis to pressure upon the brain. On performing the post-mortem examination, the existing pressure makes itself known by the increased tension of the dura-mater, by flattening of the convolutions; the subarachnoidal space being empty, the ventricles distended by serous fluid. Leber regards the effusion in the ventricles as a very important feature of the disease. Here we find a serous effusion, while the parts are subjected to great pressure, which he attributes to an irritation induced by the disease, probably, in the stage of growth of the tumor, having as a result hydrocephalus internus. He calls attention to the great resemblance of this condition to hydrops subretinalis, where following a choroidal tumor we find the secretion of a serous fluid taking place in a state of increased intra-ocular pressure; this fluid again exerting pressure upon the vitreous humor causes its disappearance, in the same way as the intra-cranial pressure empties the subarachnoidal space of its contents. The increased pressure, therefore, is not only due to the displacement caused by the size of the tumor, but also to the pressure of the fluid occupying the ventricles; which of these two conditions is to be regarded as the chief factor in producing the neuritis it is extremely difficult to say. It is somewhat remarkable that hemorrhages, though actually causing a greater displacement than tumors, are

extremely seldom found to produce neuritis; the same is true of cerebral abscess. We must seek the explanation in the fact that a tumor sets up an irritation, which radiates to various parts of the brain, as has already been stated, and produces a hypersecretion in the ventricles, which in turn exerts pressure upon the surrounding parts. In the case of effusions the damage is more limited to the locality in which they occur, and though very severe general symptoms are produced, no irritation seems to be reflected to distant parts of the brain, as has been found to be so prominent a characteristic of cerebral tumors.

An exception is presented when a hemorrhage escapes at the base of the brain, directly between the optic nerves; here a double neuritis may readily be the result.

While a few cases of neuritis have been reported in connection with cerebral abscess, this condition cannot be regarded as favorable to the production of neuritis. Hughlings Jackson, to whom we owe so much for our knowledge of these conditions, states that in no case of abscess of the cerebellum has he ever observed a neuritis, while in tumors of the cerebellum he has found this to be a constant symptom.

It has been found that meningitis is capable of producing neuritis, and neuro-retinitis. Leber states that this does not, however, take place as often as some authors indicate. The more reliable observers agree in the opinion that in acute meningitis it is an extremely rare occurrence, though simple hyperæmia of the retinal vessels may be frequently observed. Among the cases in which neuritis was detected, tubercular meningitis was most frequently found. Very little that is reliable is yet known regarding neuritis depending upon simple meningitis. Schirmer has drawn attention to the exceptional possibility of neuritis associating itself with cerebro-spinal

meningitis; here this brain affection wanders from its usual path in assailing the eye, this organ generally falling a prey to the ravages of suppurative choroiditis.

In the cases of neuritis superinduced by chronic meningitis, some observations place it to the account of effusions at the base of the brain, others to an inflammation travelling along the optic sheath and ultimately extending to the papilla; the latter condition has already been alluded to in this paper, or the descending neuritis of Von Graefe.

It must be mentioned here that a sudden and permanent loss of vision may be occasioned by a meningitis, and at the time no apparent change in the optic disk may have taken place; but gradually atrophy of the optic nerve will reveal itself. Probably occurrences of this nature are due to inflammatory exudations at the base of the brain.

In describing the manner in which cerebral tumors give rise to neuritis, we took notice of hydrocephalus internus as one of the factors. Primary hydrocephalus internus may, as Türck has shown, destroy vision by the direct pressure exerted by the distended third ventricle upon the chiasma, leading the nerve to atrophy, without a preceding neuritis having presented itself. On the other hand, a primary hydrocephalus internus may call forth an optic neuritis, in the same manner that it contributes to this result, when it is associated with intra-cranial tumors.

In various orbital affections we are furnished with examples, how an optic neuritis may originate, from the nerve trunk being subjected to pressure in the orbital cavity. Tumors of various kinds, acute inflammation of the orbital tissues, peritonitis, etc., may each lead to optic neuritis, though in these cases, the ophthalmoscopic picture of the disease does not present its features in as permanent degree as in the case of

cerebral tumors; of course in these cases the disease is limited to one eye.

Inflammations of the optic nerve occurring independently of any morbid condition of surrounding parts are rarely met with; but they are not altogether wanting. Syphilis, in its desperate raids in every direction, does not altogether spare this part of the body. Rheumatism is suspected of subjecting the nerve to similar attacks. The same observation has been made in menstrual anomalies, lead poisoning, in scarlet, typhus and typhoid fever.

The ophthalmoscopic picture of optic neuritis differs very much in its degree of intensity in different cases; the changes which are presented, however, are generally quite pronounced. At first, a simple hyperæmia of the retinal vessels is observed; as it advances, the disk loses its characteristic reddish orange color, it becomes intensely reddened; as the serous infiltration increases it becomes cloudy, somewhat swollen, and its outline less clearly defined. The retinal vessels undergo quite a decided change. The veins become congested, and are rendered tortuous, and their dilated condition presents a marked contrast to the attenuated state of the arteries. The high degree of œdema which may take place renders the papilla quite prominent, and indeed the retinal vessels in the disk may be hidden quite from view, being buried in the swollen tissue surrounding them. Under these circumstances, the vessels seem to have their starting point at the margin of the disk instead of from its centre. The œdema generally extends somewhat into the retina, and an extensive development of small vessels in the disk is often observed; this, with the hypertrophy of its connective tissue, gives the nerve a fringed appearance. Sometimes the vessels are only partially obscured on account of being covered only in detached parts of their course. Hemor-

rhagic extravasations are apt to occur in the disk and in parts surrounding it. Sometimes newly-developed minute vessels, closely crowded together, present an appearance which is difficult to be distinguished from extravasations.

The subjective symptoms vary more than the ophthalmoscopic changes would indicate. It has already been mentioned, in a former part of this paper, that very decided changes may be exhibited by the ophthalmoscope, and vision may have remained intact. This fact is more frequently observed by the neurologist than by the oculist, and the credit for the original discovery is due the former. The cases which come under the observation of the oculist almost invariably present some impairment of vision which may range from slight amblyopia to complete amaurosis. It is supposed by Leber that in those cases which are marked by severe impairment or total loss of vision in the early stage of the disease, the cause is more to be ascribed to the pressure exerted by the distended ventricles directly upon the optic nerves, or upon the chiasma than to the changes which may have taken place in the papillæ. In most cases we notice that the impairment of vision comes on very gradually. The loss of vision is very similar to that observed in cases of intra-ocular tension; central vision is not only obscured but a contraction in the field of vision manifests itself, generally beginning at the nasal side, and finally extending to all parts of the field. Fortunately, in some cases, the central trouble takes a very favorable change and a corresponding improvement in vision is noticed. The most common termination of neuritis is either partial or complete atrophy of the optic nerve.

The prognosis is always to be regarded as extremely grave. In intra-cranial disease not only is the sight imperiled, but the life of the patient is in great jeopardy. The syphilitic forms of intra-cranial disease are to be regarded more hopefully, especially in their early de-

velopment. In neuritis due to orbital disease, the nerve may be exposed to pressure for a long time without causing very decided impairment of vision, and what is still more fortunate, the cause can often be easily removed. The neuritis depending upon menstrual disturbances is also in many instances amenable to treatment; the remedies should, of course, be principally directed to the relief of the original cause, though local treatment, especially depletion by means of the artificial leech, often serves a good purpose. Even cases due to severe intra-cranial disease sometimes become ameliorated either spontaneously or with the assistance of local depletion, setons, mercury and the iodide of potassium.

DIARRHŒA IN THE YOUNG: ITS VARIETIES AND TREATMENT.

BY WILLIAM LEE, M. D.,

Attending Physician to West-End Free Dispensary for Treatment of Medical and Surgical Diseases of Children, Baltimore.

That diarrhœa is ever a salutary process in the young, I cannot believe, from the simple fact that we see how readily in them mild forms of diarrhœa, when neglected, are converted into severe ones. And further: whilst the bowel is known to be the means by which absorption goes on, and the nutritive matter of our food is assimilated, it is also that by which unassimilated material is got rid of, and for that purpose often in the adult a salutary diarrhœa is set up; such a state of things cannot be risked with the young, for the reason that at that time of life the whole constitution is undergoing a constant change and succumbs readily to any undue excitement.

Of simple diarrhœa I recognize three forms: First, that from excessive curdling of the milk in the stomach, caused either by the milk being hastily swallowed and not being well mixed with saliva, or by a preternaturally acid condition of the digestive canal. In these cases we have first emesis and then the diarrhœa, or the two often together. Second, diarrhœa from dentition, not often seen. Relief is found in lancing the gums and counter-

irritation. Third, nervous diarrhoea, which I think exists much oftener than is generally believed (why authors of works on diseases of children, in describing the different forms of diarrhoea, should say little or nothing of it, I cannot understand, for surely the nervous system of the young is much more easily influenced than that of the adult).*

Inflammatory diarrhoea may be the result of neglect in the treatment of any of the simple forms, but most frequently is caused from catching cold, during the sudden changes of the weather, particularly at certain seasons, exposure to impure air and bad water, decaying vegetation, improper food and excessive heat. Treatment of the simple forms of diarrhoea has for its object the immediate removal of the exciting causes. When it is due to acid fermentation of the food, alkalies are useful, and their beneficial effects cannot be overrated.

Either potash or soda may be used, by preference the former, it being a probable constituent of milk, the natural diet of children. If any further treatment is required an aperient of small doses of rhubarb and soda should be given to clear away any indigestible food that may have remained in the bowels, then a continuance of the alkali with aromatics, the following being a very good combination:

R Bicarb. Potassae, gr. ii; ol. cajuput., gtt. i; aquae cinnamomi, 3 ii.—A dose at six months of age. Great importance should be paid to the diet, and as our object is to keep up the nutrition of the body with the smallest possible amount of irritation, food should be given not only in such a way best suited to the case, but the medical attendant should display much tact, ingenuity and patience, in regulating the diet during each twenty-four hours, and I know of no change from the ordinary milk and lime water, equal to that of alternating the giving of Mellin's Food (which is prepared upon the principles advanced by Liebig, and which I have been using with great success since the publication of Eustace Smith's work on "Wasting Diseases of Children"), with that recom-

mended so highly in Meigs & Pepper's valuable book on the diseases of children, fifth edition, page 338. It is made by dissolving a small quantity of gelatine, or Russian isinglass in water to which is added milk, cream and arrowroot, or any other farinaceous substance that may be preferred. The exact mode of preparing the food is as follows: A scruple of Russian isinglass, or a piece two inches square of the flat cake in which it is sold, is soaked for a short time in cold water, and then boiled in half a pint of water until it dissolves—about ten or fifteen minutes. To this is added with constant stirring, and just at the termination of the boiling, the milk and arrowroot, the latter being previously mixed into a paste with a little cold water. After the addition of the milk and arrowroot and just before the removal from the fire, the cream is poured in, and a moderate quantity of loaf sugar added. The proportions of milk, cream and arrowroot must depend on the age and digestive power of the child. If the stools should continue loose and frequent, and there be much straining, bismuth, with a drop or two of laudanum, will be found to answer well, in addition to the alkali mixture, which should be persisted in as long as the tongue remains furred, or the motions smell sour.

For nervous diarrhoea, I find tepid baths, night and morning, with internal treatment of sub nit. bismuth and small doses of freshly pulverized nux vomica, followed by bromide potash, to effect a cure. In treating inflammatory diarrhoea, our first endeavor should be to obtain a clear diagnosis, and as far as possible not be misled by either the patient or its mother. I have often, for instance, seen children who not only would tell me that their whole abdomen pained them, but who would flinch and go on in the most dreadful manner, whenever an attempt was made to examine them, while at the same time there would be no evidence of inflammation, either in the stools or record of temperature taken night and morning. Having ascertained that inflammatory diarrhoea really exists, what is the first thing to do? Is it to give mild purgatives and then strong astringents and opium mixture? By no means. Is it to try some highly recom-

*The author will prepare shortly a paper upon the subject of *Nervous Diarrhoea*.

mended preparation, or some doctor's favorite prescription? I say most emphatically no. Every case of inflammatory diarrhœa I have seen has some condition or symptom peculiar to itself. What we should do first of all in these cases (and this applies equally well to all forms of diarrhœa) is to attend promptly to the action of the skin. There being more or less early suppression of the cutaneous secretions, the consequence is a great tendency for the skin to become dry, rough and harsh. To relieve this the child should be bathed morning and evening with warm water, and once freely anointed with camphorated oil; care should be taken to see that flannel is worn next the skin, and in very severe cases a flannel bandage kept around the waist. After using the usual remedies given in the first stages of inflammatory diarrhœa, I know of no better preparation, or one that will give such uniform success as Dover's powder, with the addition of chalk and camphor, which combination was first mentioned by Dr. H. D. Vosbourgh, of Lyons, and is made as follows:

℞. Opii Pulv.

Ipecac "

Potass. Nit. pulv.

Pulv. Camph.

Cretae Preparat.

(English)

Rad. Glycyrrhizae pulv.

āā ̄ i

āā ̄ iv

āā ̄ ii

The chalk must be carefully ground with the gum camphor, in order to keep it in a perfect powder, and then the other ingredients added. Dose in proportion to age. The camphor not only acts beneficially as a stimulant, but being chiefly eliminated by the skin and bronchial mucous membrane, assists the action of the Dover's powder.

For the chronic stage of inflammatory diarrhœa the fluid extract Bael, lately prepared from the Bael fruit, will be found to do well and may be given in conjunction with the usual tonics given in these cases.

The fifth annual meeting of the American Dermatological Association will be held in Newport, R. I., on August 30th and 31st, and September 1st.

NOTES ON TWENTY-SEVEN CASES, IN WHICH THE INTRA-UTERINE DOUCHE WAS GIVEN IN THE MATERNITY HOSPITAL, BALTIMORE.

BY THOMAS OPIE, M. D.,

Prof. of Obstetrics, College of Physicians and Surgeons, Baltimore.

(Read before the Section on Obstetrics and Gynecology, Med. and Chir. Fac. of Md., May 27, 1881.)

CASE 1.—M. S., confined September 30th, 1876; married; aged 26; third child; male; weight 8½ pounds; first stage 7½ hours; second stage 25 minutes. Severe after-pains keeping up on the third day, the uterus being subinvolved, temperature continuously over 100° and pulse 120, the intra-uterine douche was determined upon. It was given night and morning, bringing away fetid material. Quinia was given. She made a good recovery, and was discharged October 26.

CASE 2.—C. K., confined December 30th, 1876; single; primipara; male child; weight 8 pounds. Dilatation was tedious and painful. Chloroform was used and forceps applied in the second stage. Third day there was tenderness over the uterus with severe after-pains; temperature 102°, pulse 115. Morphia and cinchonidia were given. Fourth and fifth days temperature was near the norm; sixth day it rose to 103° and pulse to 120. A single intra-uterine douche was given and large doses of quinia. Seventh day temperature normal and did not rise again. She was discharged in good condition January 22d.

CASE 3.—M. D., confined January 6th, 1877; single; primipara; age 19; female child; weight 7.8 pounds; 12 hours in labor; bag of waters ruptured in advance. Patient did well up to the eighteenth day after delivery, when she was taken with a decided chill followed by intense headache and tenderness over the abdomen; temperature 103°, pulse 105. Lochia was arrested. The intra-uterine douche brought away coagulated blood, mucus and pus. Quinia, grs. x, was given every three hours. The following day the lochia was reestablished;

the temperature 101° and pulse 80. She was discharged February 7th.

CASE 4.—M. G., confined January 13th, 1877; married; age 33; second child; male; weight 7.8 pounds; pulse during labor 72, after 64. First stage lasted 6 hours; second 3 hours. The uterus remaining large after labor, fluid ext. ergot was given. Fifth day temperature 102.5° , pulse 102; lochia offensive. The intra-uterine douche was given night and morning. Quinia and morphia were used. Sixth day temperature 103.5° , pulse 102. Seventh day temperature $98\frac{1}{2}^{\circ}$, pulse 72. Discharged February 19th.

CASE 5.—L. J., confined January 13th, 1877; single; primipara; male; weight 7 pounds; pulse during labor 76; afterwards 72; perineum ruptured three-quarters of its extent; no sutures; retraction of uterus good. January 14th had a chill; temperature 104° , pulse 120. Quinia given in antipyretic doses. January 15th temperature 101° , pulse 116. January 16th temperature 105° , pulse 126. Quinia and tinct. of veratrum given. January 18th pulse and temperature still high; lochia stopped; great and general abdominal tenderness and tympanites. Intra-uterine douche was given every two hours, and turpentine stupes and warm poultices applied. The lochia was not reestablished. The temperature was not in the least reduced by the antipyretics and douches. Patient died January 27th, the fourteenth day after confinement. No post-mortem.

CASE 6.—M. S., confined January 22d., 1878; single; age 35; seventh child, a female weighing 7 pounds 4 oz; first stage 5 hours; second precipitate, occupying only five minutes. Pulse during labor was 68, after 48. Did well until the sixth day, when she had a chill. Lochia was arrested. Temperature 104° , pulse 115. The intra-uterine douche and quinia were resorted to. This proved to be a case of intermittent fever which was controlled by the quinia. She was discharged February 19th.

CASE 7.—L. J., confined January 22d., 1877; single; primipara; age 20; child, female, weight 6 pounds; first stage $4\frac{1}{2}$ hours, second a half hour. She did well up to the sixth day, when temperature rose to 102.5° , pulse 100. Lochia

ceased. Gave one intra-uterine douche and quinia, gr. iv, every two hours. Temperature continued high until the eighth day, when temperature and pulse were near the norm. She left the hospital February 17th.

CASE 8.—J. T., confined January 22d., 1877; single; primipara; male child, weight 7.8 pounds; 15 hours in labor; forceps applied. Perineum ruptured by the shoulders three-quarters of its extent. Silver sutures used; retention of urine. Second day, temperature 102° , pulse 100; third, temperature 102° , pulse 104; fourth, temperature 102.5° , pulse 108. Large doses of quinia were exhibited without avail in reducing temperature. The vulva became œdematous, and there was a free suppurative discharge from the vagina and perineum. The lochia was arrested. An intra-uterine douche was given. On the fifth day temperature was 102° , pulse 112; sixth day temperature and pulse still high; vulva very œdematous and disposed to slough. The intra-uterine douche was used night and morning. The raw surfaces of the rupture were mopped with a solution of carbolic acid and glycerine (gr. xx— $\frac{3}{4}$ i). Seventh day temperature 101° , pulse 84; eighth day temperature 105° , pulse 86; ninth day temperature 99° , pulse 76; tenth temperature 99.5° , pulse 80. The raw surfaces of the rupture are healthy. Patient continued to improve up to the twenty-first day, when facial erysipelas set in. This was soon subdued by 3i doses of muriated tincture of iron. After a slow convalescence she was discharged April 16th.

CASE 9.—M. G., confined February 28th, 1878; single; primipara; age 19; child, male; weight 6.4 pounds. Was brought to the hospital when in labor, which ended in about a half hour. She had a profuse hemorrhage thirty minutes after delivery. The clots were turned out, ice introduced and fluid ext. ergot given internally. Second day uterus again distended; temperature 105° , pulse 90; third day uterus extended above the umbilicus; temperature 100° , pulse 96; fourth day temperature 103° , pulse 104; gave intra-uterine douche and quinia; fifth day temperature 99.2° , pulse 90; sixth day chill; temperature 103° , pulse 112; intra-uterine douche and quinine;

seventh, temperature, 100° , pulse 84. Improved continuously and made a good recovery.

CASE 10.—M. N., confined March 16th, 1878; single, primipara; age 21; had post-partum hemorrhage; second day temperature 102.5° , pulse 108; third day temperature 103° , pulse 108; lochia grumous and offensive; gave quinia and intra-uterine douche; fourth day temperature 102° , pulse 100; administered quinia and intra-uterine douche; fifth day temperature 102° , pulse 110; same treatment continued; sixth temperature 98.5° , pulse 80. Left hospital in a fair condition April 27.

CASE 11.—M. R., confined March 24th, 1878; single; primipara; age 21; child female, weight 6.5 pounds; time in labor four hours; had severe after-pains; first day temperature 98.5° , pulse 80; second day temperature 100° , pulse 104, lochia offensive and contained many clots. An intra-uterine douche and thirty grs. of salicylate of soda were given three times during the day; third day temperature 101° , pulse 100; fourth day temperature 98.5° , pulse 118; fifth day temperature 102.5° , pulse 100; sixth day temperature 103° , pulse 100; seventh day temperature 99° , pulse 90; eighth day temperature 99.5° , pulse 84; lochia normal. The douche, which had been given three times daily, was discontinued. The child being weak and unable to nurse, it became necessary to dry up the milk. The breasts were subjected to pressure by a figure of eight bandage around the body. The following record was made while under this treatment: Eighth day, A. M., temperature 99.5° , pulse 92; P. M., temperature 102.5° , pulse 96; ninth day, A. M., temperature 98.5° , pulse 92; P. M., temperature 102.5° , pulse 96; tenth day, A. M., temperature 101° , pulse 84; P. M., temperature 104° , pulse 100; eleventh day, A. M., temperature 100° , pulse 96; P. M., temperature 102° , pulse 108; twelfth day, A. M., temperature 99.5° , pulse 92; P. M., temperature 102° , pulse 118; thirteenth day, A. M., temperature 98° , pulse 86; P. M., temperature 101.5° , pulse 88; fourteenth day, A. M., temperature 99.5° , pulse 76; P. M., temperature 101.5° , pulse 90; fifteenth day, A. M., temperature 98° , pulse 92; P. M., temperature,

103.5° , pulse 112; sixteenth day, A. M., temperature 98.5° , pulse 80; P. M., temperature 102.5° , pulse 100; seventeenth day, temperature 98° , pulse 80; P. M., temperature 102.5° , pulse 100.

During the above mentioned ten days there was neither uterine tenderness, sub-involution, tympanites nor disordered lochia. I think it a fair presumption that during the period of abnormal lochia there was slight septicæmia, and that the above persistently high temperature and pulse were due to compression of the breasts. The average difference between the morning and evening temperatures during the ten days is remarkable, being 3.3° . In simple cases of sore nipples, fissures, excoriations and abscesses of the breasts, we frequently observe a thermometric rise which seems scarcely proportioned to the amount of trouble. The bandage was kept firmly applied for two weeks. As soon as the secretion of milk was suppressed patient gained health and strength rapidly, and was discharged April 24th.

CASE 12.—M. N., confined May 24th, 1878; single; primipara; age 21; child male, weight 9.3 pounds; length of labor four hours; catheter required four days. On the third day there was a chill followed by pyrexia; sixth day abdominal tenderness, pyrexia, vomiting; uterus large and high up; lochia profuse, with large clots, but not offensive. Gave intra-uterine douche and salicylate of soda. The douche was repeated once on the 7th, 8th, 9th, 10th, 11th, 12th and 13th. On the 12th, there was a noteworthy reduction of temperature from 102° to 99° , immediately following the douche. Improvement continued until she left the hospital June 22d. This case presented the appearance of incipient septicæmia which I think it is likely was arrested by the douche.

CASE 13.—J. S., confined June 27th, 1878; single; primipara; age 25; temperature immediately after labor 99.5° , pulse 84; second day temperature 98.5° , pulse 68; third day temperature 105° , pulse 100; antipyretics given and the vagina washed out with warm carbolyzed water; fourth day temperature 103° , pulse 84; fifth day temperature 98.5° , pulse 84; sixth day lochia grumous and fetid, abdomen tympanitic. Despite quinia

her temperature in the evening was 104° . The intra-uterine douche was given for the first time, bringing the temperature down to 103.2° ; seventh day, 9 A. M., temperature 103.5° , delirious, tympanitic, lochia offensive. Douche given and repeated at 12 M.; at 4 P. M. temperature 108° , pulse 150, breathing rapid and stertorous; died at 7.30 P. M. *Post-mortem* revealed decomposed clots in uterus at the placental site; cervix gangrenous, whole uterine wall thickened and inflamed; no peritonitis.

CASE 14.—A. K., confined September 16th, 1878; single; primipara; age 22; length of labor $4\frac{1}{2}$ hours; first stage $3\frac{1}{2}$ hours; second stage 1 hour. The hand presented alongside of the head in the first stage. An unsuccessful attempt was made to replace it. It was subsequently drawn down and the next pain expelled the child, which, feeble and exhausted, died in an hour; second day temperature 101° , pulse 84; uterus large; lochia normal; third day temperature 105.5° , pulse 120; no engorgement of breasts; lochia scanty but no odor. The remedies to control pulse and temperature, which had been given internally, seemed to have no good effect. The intra-uterine douche was given at 10 P. M., reducing the temperature to 103.4° at once, and at 11 P. M. to 102.2° . The douche was administered daily until the 22nd of September, when improvement was marked. September 30th patient sat up an hour; November 1 left hospital.

CASE 15.—M. R., confined November 7, 1878; single; age 19; length of labor 9 hours; first stage tedious; chloral and afterwards chloroform were given. Forceps applied. On the second day she had a chill followed by severe uterine pain. The inflammation extended from the uterus along the right broad ligament to the cæcum. Tympanites was constant and diarrhoea was occasional and seemed to give relief. The temperature kept up stubbornly, except when reduced by therapeutic agents, to 104° for thirteen consecutive days. The pulse never was higher than 104° and was readily controlled by tinct. of aconite. The intra-uterine douche was used first on the seventh day at 11 P. M. She expressed herself as feeling much better after it and at 12 M., the temperature had been re-

duced one degree. Douches in conjunction with other treatment, were used for seven days. Patient convalesced slowly and left December 17.

CASE 16.—S. J., confined November 19th, 1878; single, primipara, age 20; time in labor eight hours; forceps used.

Half an hour after labor patient's temperature was 104.4° , pulse 80, respiration 20; second day 9 A. M., skin hot, face flushed, lochia normal, coryza, uterus well contracted; third day 9 A. M., temperature 104° , pulse 128, respirations 26, uterus large, abdomen tender and tympanitic, vulva swollen and œdematous, lochia scanty; 6 P. M., same symptoms; uterus extended above the umbilicus; fourth day temperature 103.5° , pulse 112, vagina gangrenous, discharge ichorous, stupor. Vaginal douches were given every two hours and carbolyzed glycerine cloths applied between the labia. Fifth day uterus still very large, gangrene of vagina arrested. At 12 M., gave intra-uterine douche; 6 P. M., temperature 101° , pulse 98; sixth day 9 A. M., uterus large, tender, discharge purulent and offensive, temperature 104° pulse 120; gave intra-uterine douche; 6 P. M., temperature 102.4° , pulse 120; gave uterine douche; no medicine; temperature at 9 P. M.; 100.8° , pulse 92; seventh day 9 A. M., temperature 102° , pulse 120, flush on the right cheek, pain and tenderness over left broad ligament and fundus of uterus. Intra-uterine douche given at 4 P. M.; 6 P. M., temperature 103.2° , pulse 104; eighth day 9 A. M., slept well from morphia, temperature 102° , pulse 112, eat for breakfast tea, toast, and a mutton chop. Slept soundly again for two hours during the forenoon and on awaking had temperature 100° and pulse 92. Complained of hypogastric soreness at 9 P. M., and there was an elevation of temperature 2° . Ninth day, 9 A. M., temperature 104.2° , pulse 120; pain continued; intra-uterine douche given four times in twenty-four hours, and morphia administered hypodermically; temperature stood almost without change at 102° , and pulse 100, respirations 25. The douche brought away a large quantity of pus. Tenth day, pulse was 95, temperature 101° ; quinia, tr. aconite, morphia, and the uterine douche, were continued; eleventh day an average pulse of 125,

temperature 103° , respirations 28; twelfth day, temperature 103° , pulse 144, respirations 32; vomited a dark grumous fluid, pulse feeble and rapid, great pallor, abdomen much distended. *Post-mortem:* General appearance indicated great anæmia. The labia-minora were œdematous. Abdomen was tympanitic and covered with a layer of fat three eighth inch in thickness. Plastic lymph bound together the visceral and parietal layers of the peritoneum, also the folds of the intestines. There was a quart of sero-purulent fluid in the abdominal cavity. The intestines contained hardened feces and were distended with gas. The kidneys were congested, a section of each was followed by the exudation of blood on the cut surfaces. The uterus was subinolated; six inches long, three and a half broad; on the anterior portion of the internal surface, midway between the os and fundus was a gangrenous spot. A second gangrenous spot, $2\frac{1}{2}$ by $1\frac{1}{2}$ inches, with well defined edges, occupied the fundus and posterior part of the uterus. This slough broke through into the peritoneum, in extracting the uterus. The uterus was split by the scalpel from cervix to fundus. The internal surface presented sloughs as indicated by the spots on the outside of the neck and fundus. The walls were thick and soft. The placental site was gangrenous and a large sloughing mass partially detached rested on it.

(To be continued).

CLINICAL LECTURE.

A GLARING DEFECT IN THE TREATMENT OF AURAL CASES BY SOME PHYSICIANS.

By JULIAN J. CHISOLM, M. D.,

Professor of Eye and Ear Diseases in the University of Maryland.

On our last clinic day, a woman, aged forty-eight, was among the applicants for treatment; she was deaf in the left ear. You heard her say that for four weeks she had been under the professional care of a leading physician who had exhausted her finances while trying to restore her hearing. He had been

very kind and attentive she said, but having spent all of her money without obtaining the desired relief, and having no more means with which to recompense her physician for his continued professional services, she had come to the college clinic as a charity patient, asking for further treatment. In your presence she responded to a few general questions as to the peculiar symptoms of her deafness. She said that on the left side of her head there was a decided dullness of all sounds. There was much noise in her head. She had suffered no pain. She had had a cold and some little soreness of the throat, which had passed off under the treatment of her kind physician, but the dull hearing still continued. I commenced with her the regular order of examination, which is to be instituted with every patient who applies for aural treatment. Under a strong light, the external aural passage was examined before you. As soon as the ear was drawn outward so as to open widely the passage a plug of dark wax was found, which concealed the drumhead from view. Before proceeding any further in the examination of the auditory apparatus, this plug was removed, as in itself a very common cause of deafness. The judicious application of water by use of the ear syringe, removed the wax, cleaned out the external meatus and she at once said: "my hearing has come back"; her deafness of many weeks disappearing as if by magic.

The question which interests us in connection with this most instructive case is, why did not the family physician during her four weeks of treatment inspect the external ear and discover the presence of this mechanical cause for the defective hearing? A second question of equal interest would be, was this physician particularly careless? and is this an isolated case of neglect? Unfortunately or shall I rather say fortunately for the specialist who treats aural diseases, just such cases are of common occurrence, and by them he often makes great reputation. On the very day that this deaf patient with ceruminous deposit had her hearing restored in your presence, I had seen in private practice a gentleman from Texas. Under the advice of his family physician

he had left his very distant home to put himself under my professional care for defective hearing, which annoyed him much in the daily pursuit of his business. His family physician was a surgeon of much local repute and was considered the leading medical man of his neighborhood. The patient complained of a stuffed feeling in his head and of constant buzzing in his ear. He had nasal catarrh and an annoying throat. His home treatment had been most varied, but with no permanent good result. He had had his ear syringed many times a week, but nothing came away. The diagnosis made by his home physician was Eustachian closure, and he was sent to Baltimore to have them opened by special surgical treatment.

As a specialist never accepts a diagnosis until his own examination fully sustains it, I commenced in this case, as I always do, with the stereotyped exploration of the external meatus.

An inspection of the healthy ear gave a clear view of the bright spot on the drumhead, as an evidence that no mechanical obstruction existed in this aural passage. When the dull ear was looked into, no such bright spot of reflected light could be seen. On the contrary the bottom of the passage was of a dirty whitish-brown color, and seemed to be on a much more anterior plane than the healthy drumhead. Although he had been syringed so very often, warm water was again brought into requisition, and after a vigorous application of the syringe out came a large plug of wax mixed with dermic exfoliations from the lining of the meatus. With the escape of this mass all the ear discomfort of many months disappeared. The recipient was profuse in thanks and in his praises of my marvelous skill, and will ever wonder with gratitude at the perfection to which aural surgery has attained. He will have travelled nearly 5,000 miles on the round trip to his home, but considered himself well paid by the relief which he so promptly secured. With him this gratitude was genuine, and he felt that I deserved all the praise which, in his surprise and delight at restoration, he showered upon me. With me the feeling was of a totally different nature. I found myself repeatedly asking the question,

Why did not his physician at home syringe his ear properly, and save him this waste of time, anxiety and money? Why do good physicians permit specialists to make great reputations at so small an outlay of professional skill?

It is not a fortnight since a gentleman came to visit me professionally from Western North Carolina. He also had a deaf and very uncomfortable ear of many months standing. During the past winter he had had frequent colds and was treated for a catarrhal deafness. His throat had been touched with nitrate of silver, and he had used nasal douches, but all to no purpose as far as his hearing was concerned. Eustachian obstruction had been the diagnosis in his case also, and he was sent to me for the application of the Eustachian catheter. The routine inspection of the external ear exhibited ceruminous deposit, which the syringe with warm water brought away, with perfect relief of all of his symptoms. Still another case from a distant town had been under the treatment of an active surgeon, who had applied assiduously blisters behind the ear, and had also recommended the use of the Politzer air bag. The syringing of the ear and the restoring of hearing by this simple treatment was left to me, and of course my reputation grew accordingly. I might go on to enumerate case after case, for I see them very frequently and from all parts of the country, in which the most serious diagnosis had to give way to the finding of wax plugs. In fact, such cases form a large class from which specialists in aural surgery make great reputations. But should such things be? It is bad enough when the patient comes from the family physician to the specialist, both residing in the same city, as in our clinic case; but to travel a very long journey, actually thousands of miles, and from cities boasting of the very high attainments of their medical men, is a sad commentary upon careful surgery.

As a rule, the examination of the external ear is a comparatively simple matter. A certain routine is followed by every specialist and should be adopted by every physician. *In every patient complaining of defective hearing, the external auditory meatus should be always*

explored, and to its very bottom. No specialist is content with this examination, until he sees the drumhead. This is the only evidence to him that the passage is clear, and that no mechanical obstruction exists to prevent the proper action of air vibrations upon the tympanic membrane. Of course he must have the requisite knowledge, to be able to determine whether he sees the drumhead or not. The drumhead is recognized as a whitish membrane, located about one and one-fourth inch from the outer orifice of the ear. In a proper light, a prominent white line is seen coming from above and extending vertically downwards to the centre of the drum membrane. This white line is the long process of the malleus embedded in the substance of the drumhead. From the free extremity of this bony process, extending obliquely downward and forward, is a triangular bright spot of reflected light, which when seen means always a clear and unobstructed external meatus. It is this bright spot of light that the specialist looks for in the examination. Putting the patient in a good light directly before the window, I seize the external ear and draw it directly forwards and upwards. With the other hand, I stretch the anterior edge of the opening towards the face, as you see me now doing. This manipulation of the ear converts the crooked external meatus into nearly a straight tube, and exposes to view the whole length of the passage. The head of the observer must be so placed as not to interfere with the light of the window. A very little practice will enable him to see the drumhead at the further end of the tube, and when he detects the white line running from the upper border of the drumhead to its centre, and the bright reflected surface near the free end, he has positive proof that no wax plug exists.

The ears of some persons exhibit so large an opening and so straight a tube that these peculiarities on the drumhead can be distinctly seen without manipulation of the anterior portion of the passage. In other persons the auditory tube is so much curved in a downward and forward direction, that the drumhead lies on a different plane from the external opening. This very bent di-

rection of the aural passage is fortunately not often met with, but when found needs a good deal of manipulation of the external ear and the head of the observer before the drumhead can be illuminated from the window light.

I am supposing that the family physician who is inspecting the ear of his complaining patient has neither aural speculum nor condensing mirror. By the use of these two simple instruments there can be no great difficulty in making a perfect examination of any ear.

In most of the cases of ceruminous deafness, the brown wax plug was so near the face surface that the only explanation for not seeing it was not looking for it. The history by the patient of throat symptoms and catarrh, had misled the doctor and had concentrated his observation and treatment on the throat exclusively. They seem to have forgotten the immediate relation between the nerve supply of the throat and the ear, and how all kinds of throat irritations including coughs might be occasioned by mechanical irritation of the aural passage, or the presence of wax plugs.

If all ceruminous deposits were as black as those seen in the ear of our dispensary patient, there would never be difficulty in detecting them. There are ear plugs of a much paler hue, approaching even to a dirty white color, depending upon incorporation with an amount of exfoliated epidermis from the skin lining the passage. When such a small whitish plug lies deep in the ear, it may readily escape detection by the inexperienced in aural examinations. If we however have fixed in our minds, that the bright spot of light on the drumhead at the extremity of the bony process, embedded in the centre of the drum membrane, is an important factor in a successful examination, we then have positive data for our explorations. See this bright spot and you will then feel assured that no wax accumulation of an annoying character can be present.

The moral which we will draw from this common but on that account very interesting aural case is, *never to treat any affection of the hearing organ without examining carefully the external meatus even to the very drumhead.* Should we

make this our rule of practice, we will at least have the satisfaction of sending no wax plugs to other physicians to enable them to build up a reputation in aural surgery at our expense.

CLINICAL REPORTS.

GUNSHOT WOUND OF THE ABDOMEN.—*Dr. T. Z. Offutt*, of Baltimore Co., sends notes of the following case: J. R., aged thirty-five, was shot with a pistol on May 27, the ball entering the abdomen, four inches below the sternum, and two inches to the right of the median line. The patient was somewhat prostrated, but there was but little pain or hemorrhage. An anodyne was administered and he was conveyed to his home two and a half miles distant. A probe was then introduced into the opening, which passed slightly downward in the direction of the spine about four inches. Upon examining the back, one and a half inch to the right of the spine and two inches below the level of the anterior wound, a slight elevation was discovered, painful on pressure, and which was believed to indicate the situation of the ball. One-half grain of opium was ordered every three hours and a cloth wrung out of ice water kept applied to the anterior wound. Food was prohibited and only a little ice water and crushed ice allowed. After forty-eight hours, no unfavorable symptoms appearing, the bowels were moved by a small dose of castor oil; the operation was soft and contained no blood. The opium was then resumed, and the patient allowed to take small quantities of milk. On the sixth day the symptoms continued favorable, pulse and respiration being normal, and wound closing without suppuration. The bowels were again moved, the opium discontinued except at night, and an increased amount of liquid diet allowed. On the eighth day he began to complain of pain in the situation of the ball; slight fever ensued with evi-

dence of formation of pus; on the tenth day the ball was cut down upon and removed with forceps. The cavity left by it continued to discharge pus; it was treated by poultices and injecting with weak solution of carbolic acid. June 16th, the patient began to sit up. Early in July a small abscess formed at the site of the posterior wound, which required evacuation, after which recovery continued without interruption. On the 20th July the patient went out and walked three miles. Anterior wound had healed by the eleventh day after the injury. The case is remarkable in the fact that the ball (the pistol carried cartridge No. 2) traversed the entire abdominal cavity without inflicting any injury upon its contents.

FATAL CARBOLIC ACID POISONING.—*Dr. Samuel H. Anderson*, of Baltimore, sends brief notes of the following case: A negro man while under the influence of liquor drank from a bottle, which he supposed to contain whisky, but which really contained a mixture of carbolic acid, intended for disinfectant purposes, *a large swallow*. He tried to throw up but could not. He immediately began to lose consciousness, and when brought to the doctor's office, shortly after, was unable to stand, or to comprehend what was said to him. There was a very strong odor of carbolic acid on his breath, which scented the whole office. The skin was cool and clammy, the pulse about normal. An emetic and other remedies were ordered, but the patient was unable to swallow. He gradually sank and died about eight hours after the accident. No P. M.

COMMUNICATED.

THE TEACHING OF SURGERY.—A mistake often made by students, and even by practitioners, is that the surgeon who can manipulate well, or who is most ready to operate, must necessarily be the best teacher. This idea is absolutely

fallacious. Let us consider an operation before a class, as we usually see it if seated two rows of benches back; first, as far as the operator, secondly, as far as the student is concerned (no allusion is intended to the teaching of the "operations in surgery," over which time can be taken for explanation and description). We will suppose the operator is going to take off a leg: With all the care he may take, the immediate assistants will see, and trying to see with changes in position assumed by the operator, who *must* see, effectually cut off the vision of all the others. So that, beyond the blood, the gaping wound, the knife and the saw, for all practical purposes the class might as well be away. And after the operation has been done, what veteran butcher could not have done it as well, or perhaps better. As to the application of the ligatures, the recognition of the different structures which require so close an application of even the operator's eyes, what can even the nearest student see? In a somewhat extended experience of teaching this branch, clinically and didactically, we have come to the firm conclusion that beyond the familiarisation with the sight of blood, which every medical man must have, every moment that we have spent before the class in the simple operation has been time thrown away by the student. Of course operations before classes are required, and will be to the end. Still, what we want especially to guard the student against, and it is to him we are particularly speaking, is, that it is not then that he will acquire what is of most service in his future. It is the carefully prepared didactic lecture, the important points well brought out by the lecturer, that will come home to him, more than once telling what he shall do in the particular case, while all he remembers of the most brilliant operation will be, perhaps, the leg or the tumor, the blood and the knife. We, therefore, take this opportunity of impressing students not to snub these modest lectures, which, devoid of all the glitter and paraphernalia of the "surgical clinic," may not be so attractive but are certainly more useful.

O. J. C.

EDITORIAL.

TETANUS AS IT HAS RECENTLY PREVAILED IN BALTIMORE AND VICINITY. —The Tetanus which has recently prevailed in this city and suburbs, and has proven so fatal in its effects, deserves more than a mere casual allusion. It is a subject that should be carefully investigated, for we are sure that its investigation would yield results both profitable and interesting. We have collected together a few data, derived from several sources, and whilst they are not complete, nor as yet thoroughly worked up (owing to a recent indisposition of the writer), they may perhaps even in their present form be put to some use.

Our materials are derived from the following sources: The weekly reports of the Health Department, and the death certificates of physicians at the Health Office; the cases reported in the daily newspapers; facts obtained from physicians in personal intercourse; the meteorological observations taken at the Signal Office.

The total number of deaths from tetanus during the first six months of the year, as reported by the Health Department was fifteen; this does not include four cases of trismus nascentium. The deaths from *convulsions* during the same period were about two hundred and thirteen (three in adults, two hundred and ten in minors).

The deaths from tetanus reported from June 30th to August 6th were 25 or 26, besides five deaths from trismus nascentium. The mortality from convulsions during the same period is reported at fifty, all minors. There is nothing peculiar about the new-born cases of tetanus; the adult mortality ranges thus:

For week ending July 2nd,	1 case.
" " " " 9th,	4 cases.
" " " " 16th,	14 "
" " " " 23rd,	4 "
" " " " 30th,	0 "
" " " " Aug. 3rd,	3 "

We have tabulated more or less full reports of thirty-three cases of tetanus (all traumatic) proving fatal within the period extending from July 3rd, to August 1st. These cases range in age from 6 to 30. Two only are reported among blacks. As far as stated (31) all were

males. The injuries were received between June 25th, and July 23. The tetanic symptoms developed as follows:

July 2, 1 case; July 6, 1 case; July 9, 6 cases; July 10, 2 cases; July 11, 4 cases; July 12, 3 cases; July 14, 1 case; July 15, 1 case; July 16, 1 case; July 23, 2 cases; July 24, 1 case; July 27, 1 case.

The period of the development of the tetanus after the receipt of the injury was from 4 to 28 days, being in 15 of 23, from 5 to 8 days.

The duration of the tetanus was from twenty hours to ten days; in one-half it proved fatal within forty-eight hours.

The source of the injury is recorded in twenty-eight cases, viz: From toy pistols, 25; teeth of rake, 1; Roman candle, 1; rolling machine, 1.

The seat of injury was in twenty-seven cases the hand, in two the foot, and in one the abdomen. The left hand was wounded in thirteen, the right in eight. The palm of the hand was the part injured in five, the ball of the thumb in one, and the forefinger in two; the sole of the foot in one; and the upper surface of the foot in one. In the case of the abdominal wound the wall was penetrated and peritonitis ensued. The situation of the injury so frequently in the hand, and especially the palm, is accounted for by the habit in loading the toy pistol of holding the muzzle in the left hand, in such a manner that it most often rests against the palm; should the trigger slip during the insertion of the cartridge (which is very apt to be the case unless care is used) the explosion takes place inflicting a wound in the palm usually near the ball of the thumb. In many cases portions of the metallic case, or thick wadding have been buried in the flesh. Ordinarily tetanus is more frequently due to wounds of the feet than the hands; the cause of the reverse in the present instance is obviously from the mode of injury.

Naturally the treatment pursued has been very varied. Almost all the remedies usually recommended have been tried without avail. One or two cases are reported to have been cured, but we have no authentic data. Dr. Allan P. Smith, who has perhaps seen more cases than any other physician informs the

writer that he has one case which has reached the twentieth day and seems to be in a fair way to recovery. The treatment in this case has been hypodermic injections of morphia, with bromide and chloral internally. Another case is reported by another physician treated by camphor, in which a cure seems probable. Nerve-stretching has been practised in one case only,—by Prof. Tiffany. The injury had been inflicted on the index finger, and the median and ulnar nerves were stretched on the fourth day of the tetanus; some alleviation of the symptoms was manifested, but death ensued six days afterwards.

Of course there are no statistics available to show the proportion of cases of tetanus to the whole number injured. There can be no doubt however that a vast number of injuries similar in all respects to those which gave rise to tetanus have occurred without being followed by any such results. We have collected quite a number of these, illustrating every form of wound. Perhaps it is too soon to speak with certainty of these cases yet, as tetanus may hereafter develop in many of them. Still we know of cases in which pieces of wad or cartridge have been cut from the wound, or otherwise removed at intervals of several days (in one 10), in which several weeks have elapsed without any bad symptoms appearing.

As the affection is known to have exhibited an epidemic character, the question of prophylaxis is worthy of consideration. Dr. Smith states that with this object in view he has avoided operating recently whenever it was practicable to do so.

The question of the relation of atmospheric conditions is one not to be forgotten. With a view to elicit information upon this point, the writer has prepared charts of the daily variations of thermometer, barometer and relative humidity, as recorded with great fulness and accuracy at the signal office in this city. Comparing these we discover nothing peculiar as to the barometer, but we cannot fail to be struck with the high relative humidity reported July 9th to 13th, the period at which it will be observed the greatest number of cases of tetanus developed. The high range of

the thermometer also from about the 3rd to the 16th is worthy of observation. It is unnecessary to insist upon the influence of heat and moisture in the production of tetanus, as the subject is fully dwelt upon in every account of the disease.

In reply to a letter of inquiry upon the relative condition of the atmosphere during the period embraced by my researches. Sergeant Robert Seyboth, of the Signal Corps, U. S. A., in charge of the signal office in this city, has very politely furnished us with the following statement :

"As regards the possible relations of the weather conditions to the prevalence of tetanus, I can only say that the former presented nothing abnormal in temperature, pressure or humidity, during the latter part of June and during July; indeed, the latter month was remarkable for its close resemblance to the average for many years, excepting a deficiency in the amount of rainfall and in the mean relative humidity."

We thus conclude this hastily prepared and imperfect article, whose only object is to draw attention to this interesting subject in the hope that others may be induced to work it up more fully.

NURSES' DIRECTORY.—It requires but little reflection to convince anyone of the great convenience, both to the profession and the public, of a nurses' directory; i. e., an office where nurses can be secured at any time of the day or night, and where all necessary information is given in regard to their characters, capabilities, and engagements. Such a plan has been in operation in Boston for a year or two past, in connection with the Boston Medical Library Association, and with results that are said to be highly satisfactory, several hundred dollars being by this means annually added to the revenues of the association. A small sum is charged *to the person procuring the nurse*, which is doubled at night; the nurses are charged nothing. In order to carry out such a plan here effectively, it would be necessary for the librarian (as there) to reside in the library building. It will be recollected that a committee was appointed at the Faculty meeting in

April to consider and report upon this very subject, and it is hoped that the profession here will see in this matter an additional inducement to enter with ardor and unanimity upon the erection of the contemplated *medical hall*. The benefits would not be confined to Baltimore, but would be available throughout the State.

"CREDIT THE SOURCE."—Under this heading we find in the last issue of our esteemed contemporary, the *College and Clinical Record*, of Philadelphia, a complaint against other journals for having abstracted its articles without due credit. Yet, strange to relate, there are in the same number two articles copied from the MARYLAND MEDICAL JOURNAL without the least acknowledgment; one is the sanitary tract entitled "Precautions Against Scarletina and Diphtheria," by Dr. C. W. Chancellor, Secretary Maryland State Board of Health; the other is a translation made by the present writer from a German medical journal, and is entitled "Billroth's Patient Dead." The first appeared under the head of original papers in our issue of June 1st (p. 58), the second in that of July 1st under the head of miscellany (p. 116). In order to be certain that Dr. Chancellor did not himself send his article to the *Record* for publication, we have delayed noticing the subject until we received an assurance from him to the contrary. What has our contemporary to say of such flagrant *inconsistency*?

Sternberg, on injecting under the skin of a mouse a minute quantity of dried blood 7 years old, and containing the *bacillus anthracis*, found the animal dead on the following day, and upon p. m., verified the presence of the bacillus in considerable abundance in the spleen.

A SUBSCRIBER writes: "Your article on "Obstructionists," in No. 5, July 1st, 1881, ought to be in letters of gold, and posted in every physician's office in the world,"

MISCELLANY.

THE PRESIDENT.—The opinion expressed so freely as to the assured recovery of the President has not been justified by the course of events, and the case continues still a critical one. It has been found necessary to make another incision, on account of a new accumulation of pus which no longer found a ready exit by that previously made. By means of his "induction balance" (acting upon the principle of electrical excitation produced by proximity to a metallic body) Prof. Graham Bell has succeeded in locating the ball in the right lower part of the abdomen within a superficial area of two square inches, but his instrument gives no idea of the depth below the surface at which it is situated. We ardently cherish the hope that the combined skill of the surgeon and the physicist may succeed in time in securing the removal of the ball, for we cannot feel that any sense of security is well founded as long as it remains to excite continual irritation.

TREATMENT OF OLD FRACTURES OF THE VERTEBRÆ.—Dr. Küster (Berlin) said that the efficacy of Sayre's plaster of Paris bandage in cyphosis had suggested its use in fractures of the vertebræ. He had used the plaster jacket in four such cases. In two cases of fracture of a lumbar vertebra, with symptoms of paralysis of the bladder, rectum and lower limbs, it had been applied with good result; while no improvement followed in a case of fracture of the third dorsal vertebra. In a case of fracture of the middle part of the dorsal spine, with the formation of an angular projection and complete paralysis of both arms and legs, and also of the bladder and rectum, K. had broken up the callus under narcosis and applied extension (up to twenty pounds), the result being a complete disappearance of the paralysis.—*Congress of German Surgeons, London Med. Record.*

M. GAUTIER has established the fact that potassa and caustic soda in very weak solution deprive the venom of serpents of its poisonous properties.—*Academie de Medicine, Gaz. des Hosp.*

THE PENNSYLVANIA AND MARYLAND UNION MEDICAL ASSOCIATION will hold its fourth annual reunion on Thursday, August 25th, 1881. There will be an excursion down Chesapeake Bay from Port Deposit, the boat leaving that place at 10 A. M. and returning at 4 P. M. The business meeting will be held at 11 A. M. At 12.30 P. M. dinner will be served. At 2 P. M. there will be addresses by the President, Dr. J. Price, of Westchester, Penna., and by Drs. Virdin, Bromwell, Forwood, and others. The boat will stop at Havre de Grace at 11 A. M. for the convenience of such persons from Baltimore and elsewhere as may wish to join the excursion. We are assured that members of the profession and their families from this city will be heartily welcomed, and we hope there will be representatives from among us in this fraternizing reunion, the benefits of which, in drawing together the profession of the two States, can easily be appreciated.

DR. THOS. SANCTUARY reports a case of croup, in which he introduced a No. 12 catheter into the larynx, first gagging the child's mouth with a cork and compressing the tongue with a spoon. He says it was less difficult than he anticipated. There was a severe paroxysm followed by convulsive efforts of coughing, during which muco-purulent matter was expelled through the tube, after which the breathing became quiet. The tube was retained by tape tied around the neck and was removed twenty hours after insertion. Five days later she was running about the house.

A KITTEN PRESENTING THE BLENDED FEATURES OF THE CAT AND RABBIT.—Dr. W. Gray Smith, of Baltimore,

furnishes us notes of the following case: A male rabbit and female cat exhibited a great liking for each other, were constantly together, and were seen frequently in the act of sexual intercourse. The cat in due time gave birth to two kittens, one of which was perfectly natural in appearance; the other presented some remarkable peculiarities: The tail is short (a rabbit-tail in appearance), being about one inch long, and curved up on the back, the bones comprising it being ankylosed. The relative length of the hind and fore legs corresponds with that of the rabbit, the former being the longest, so that when in motion the head is on a lower level than the posterior extremity. In moving it leaps like a rabbit. Its head and ears are those of a cat. Its hair is softer than that of an ordinary kitten, being more like that of the rabbit. The markings of color of the hair are exactly like those of the old rabbit. It began early to show a liking for grass and cabbage leaves, and continues to eat them; it was taught to eat meat with difficulty. Its teeth and toe-nails are decidedly those of a carnivorous animal. It is now about three months old. For the first two months it was thrown a great deal with rabbits, whose society it seemed to prefer to that of cats. Is this a coincidence, a case of mere maternal impression, or one of crossed species?

ORGANIZATION OF A COUNTY BOARD OF HEALTH IN HARFORD COUNTY.—Representatives of the various district boards of health met at Bel-Air, July 23rd, and organized a County Board, by electing Dr. E. Hall Richardson, President, and Dr. W. Stump Forwood, Secretary. Committees were appointed to draft rules for the guidance of the Board, and to issue an address to the canners of Harford County advising them of the best means of disposing of the offal accumulating about their factories.—*Aegis and Intelligencer* (Bel-Air), July 29th.

ACCORDING to Jaccoud, who has personally visited all the principal health resorts of Europe and the Mediterranean coast, and has embodied his views in a work just issued, entitled "Curability and Treatment of Pulmonary Phthisis," the only stations to be recommended, in the climatic treatment of this disease, are, of high altitudes, Davos, Samaden, and Saint Moritz; of others, Madeira and Algiers first, with Sicily next, and Egypt only exceptionally.—*Gaz. Hebdomadaire*, June 24th.

ACUTE MILIARY TUBERCULOSIS IS MISTAKEN FOR TYPHOID FEVER.—Senator reports a case (*Berliner Klinische Wochenschrift*) of acute miliary tuberculosis in a man aged 48, who was for three weeks in hospital under his care, in whom the disease was not suspected until the autopsy. The most prominent symptoms were enlargement of the spleen, fever, roseola, and suppurative parotitis, and at the beginning epistaxis and hiccough; upon these symptoms, and absence of those pointing to the lungs, the diagnosis of typhoid fever was made. On post mortem, there were no appearances of typhoid, but general tuberculosis of both lungs, spleen, liver and kidney, and enlargement of the bronchial glands.

A CASE of suicide by dynamite is recorded. A cartridge was placed in the mouth and ignited by a slow fuse, producing a terrific explosion and almost instant death.—*Brit. Med. Journ.*, July 30.

MR. LISTER, recently, in a case of fractured patella, laid open the joint with antiseptic precautions, evacuated the extravasated blood, and brought the fractured ends of the patella into apposition by a strong wire suture.

PHTHISIS is being treated now, with reported success, by the continuous inhalation of the vapor of carbolic acid. Lister's gauze is occa-

sionally dipped in a solution of the acid and then inhaled from a constantly worn respirator. "It is fair to infer that the application to internal suppurating surfaces of an agent, which has been used in similar cases externally with such benefit, will be equally efficacious in checking the growth and development of morbid germs and thus allow tissue to be reconstructed."—*Brit. Med. Journ.*

LOCAL TREATMENT IN DIPHTHERIA.

—The *British Medical Journal* gives the opinions of a number of leading English practitioners upon the use of remedies locally in diphtheria. Dr. Octavius Sturges has not been able to convince himself of their utility; he believes that the great safety in diphtheria is in early tracheotomy. Dr. Edward Woakes applies the solid nitrate of silver very freely, stirring it into, and if possible under, the exuded mass, completely breaking up the latter so as to reach the diseased surface beneath. In very bad cases he makes this application as often as three times a day. He also uses disinfectant mouth and nose washes, and internally pushes the perchloride of iron to the limit of toleration. Dr. McCall Anderson has great faith in a spray of carbolic acid, 2-3 grs. to the ounce. Dr. Robert Cory employs a spray of sulphurous acid (B. P.), carbolic acid (1 to 60), or permanganate of potash (gr. i to 5j). Dr. Alder Smith uses repeatedly a dilute carbolic acid steam spray. Dr. Thomas Barlow applies daily the glycerine of carbolic acid. Dr. Prosser James uses lactic acid, both as spray and applied with a brush; he also believes in the utility of frequent inhalations of steam. Dr. Richard Neale finds lactic acid, applied with a brush, unfailing in its speedy action, removing the false membrane and preventing its reformation, a result to which he attaches very great importance. Dr. Burney Yeo mops the throat at the beginning with

equal parts of the liquor ferri perchloridi (or carbolic acid) and glycerine, using simultaneously gargles of chlorate or permanganate of potash. Later when the membrane is more extensive he employs as a spray 3ss carbolic acid, gr. 80 borax, ʒviii warm water. Dr. Frederick Roberts uses at an early period, to prevent the spread of the membrane, a caustic (nitrate silver stick or solution, hydrochloric acid and water, equal parts, &c.) by means of a brush, efficiently, once for all. To dissolve the membrane, or render it innocuous, he advises inhalations of steam, lactic acid, chlorate of potash, &c. To prevent absorption of putrefying matters, and consequent septicæmia, applications of chlorate of potash with dilute hydrochloric acid, chlorinated soda and carbolic acid, sulphurous acid, or similar agents properly diluted, are applicable. Frequent sucking of pieces of ice often gives great relief. He prefers the spray to other modes of application. Dr. Sydney Ringer has seen good results follow the use of carbolic acid and glycerine.

ARTIFICIAL VACCINE LYMPH.—*Mr. J. Lawrence-Hamilton*, 34 Gloucester Terrace, W., London, proposes, says, "The Lancet," to introduce an abundant supply of pure artificial lymph produced outside the body of living man or living animal, by isolating and then breeding the vaccine organisms in suitable germ nutritive solutions which have been previously deprived of all septic and other noxious germs. The publication of the special precautions and physical conditions which Mr. Lawrence-Hamilton considers necessary to secure safety and success in breeding, and then in employing, the artificial vaccine lymph, as well as the results of inoculating men, cattle, and other animals therewith, will be postponed till a subsequent date. — *N. Y. Med. Journ. and Obst. Rev., Aug., 1881.*

ANGINA PECTORIS.—High arterial tension is not to be regarded as the determining cause, but as the one factor of pain in some cases; and whilst it is true that nitrite of amyl gives relief when high tension is present, there is reason to be cautious in pressing the amyl when it fails, for by lowering tension when already low the amyl may dangerously increase the tendency to stagnation of the blood. The cases of angina which are due to high arterial tension form only a part of the whole number. There are other cases which are more purely neuralgic, and which arise from the inclusion of a cardiac nerve in the inflammatory decay of an artery. It is more violent than the first form and the intervals are more free. The hypodermic injection of morphia gives the most satisfactory result here. There are also cases of reflex angina pectoris whose source is at a distance.—*Moxon's Croonian Lectures—Med. Times & Gaz., June 18.*

HAMMOND ON ABSCESS OF THE LIVER AND MELANCHOLIA.—*Dr. Hammond* ("Neurol. Contrib.," i, 3, 1881) states that he has performed aspiration of the liver for abscess in melancholia, etc., in forty-three cases; in twenty-seven cases there was no pus nor any other fluid removed; in one there was a hydatid cyst; and in fifteen pus was obtained with relief. He asserts that in no case had adhesions formed between the surface of the liver and the abdominal wall, and that in no case was the operation followed by the slightest untoward result. He concludes from his experience that hepatic abscesses often exist, and may do so without local symptoms or general disturbance; that if associated with hypochondria, etc., evacuation of pus will result in cure of the disorder and saving of life, while, if there is no pus, no harm is done. He therefore recommends that (*in all cases of hypochondria or melancholia*) the region of the liver should be carefully explored,

and that, even if no fluctuation or any other sign of abscess be discovered aspiration through one of the intercostal spaces should be performed.—*N. Y. Med. Jour. and Obstet. Rev., August, 1881.*

FACIAL PARALYSIS.—The type of a rheumatic paralysis is that form of facial paralysis produced by cold. Cold air directed against the side of the face induces such a refrigeration of the nerve as to impair its conductivity, and lead to sudden paralysis in the muscles which it supplies. The eye cannot be closed, and expression is completely lost on that side of the face. A small proportion of the cases manifest a tendency to spontaneous cure. If severe, the muscles presently exhibit the reactions of degeneration—respond only to the galvanic current. Some effusion probably takes place in the sheath of the nerve; hence galvanism gives the best results. Stable galvanic currents may be applied at once, the anode resting on the nerve where it emerges from the skull and the cathode on its peripheral portions. Excitation of the muscles should be postponed for a few days, when it will be found that a very weak galvanic current slowly interrupted induces ready response in the muscles. Many of the cases recover in a few weeks; some require months, even years of treatment. Cases of many years' standing have been cured by persistent application.—*Bartholow's Medical Electricity.*

ALLOCHIRIA.—Prof. Obersteiner, of Vienna, draws attention in "Brain" (July, 1881) to an affection of sensibility hitherto undescribed, in which the patient is in doubt as to which side of the body has been touched, or more commonly refers the irritation to the side not touched; he termed it *allochiria*. Of four cases observed, two had sclerosis of the posterior columns, one injury to the lower part of the spine (producing compression

myelitis, with marked degeneration of the posterior columns, as shown by autopsy), and one hysteria. He thinks the affection probably due to degeneration of the posterior columns. He also draws attention to these and other facts recently observed as indicating a sensory and even a motor relation of symmetrical parts of the body.

SUGGESTIONS AS TO THE MODE OF USING THE FORCEPS.—*Dr. H. Lowndes* deduces four rules as the result of his experience: 1. Traction should be made in the intervals, instead of during the pains. 2. When traction is not being made, the handles of the forceps should be allowed to lie as far apart as they will. 3. During the pains the handles should be merely gently managed so that they may not be expelled or do hurt. 4. During the passage of the head through the vulva the forceps should be used when necessary as a restraining power during the pains, and labor completed by traction during an interval.—*Brit. Med. Jour.*, July 9th.

INTESTINAL OBSTRUCTION BY WINE BOTTLE. — The patient having seat worms was in the habit of introducing butter into the rectum to destroy them. One day, to push the butter further, he laid it on a piece of paper on the mouth of a hock bottle, and then sitting on this gradually introduced the bottle (which tapered from its base to its mouth) entirely within the rectum. Unsuccessful attempts were made to withdraw it. The mouth of the bottle could be detected on the left side of the abdomen near the short ribs. An incision under chloroform made backward between the coccyx and tuber ischii allowed more room, but still there was no success, although all sorts of forceps, cords, &c., were tried. Next day the symptoms being urgent, the abdominal wall was cut through in the left

linea semilunaris, the bowel opened in the descending colon and the bottle drawn out. The wound in the bowel was closed by a continuous catgut suture, and the patient rallied well at first but sank and died next day.—*London Letter in Amer. Practitioner.*

I HAVE for over 20 years introduced the forceps into the uterus. The first case was a primipara, aged 22, in labor seventeen hours. The os was not bigger than a crown piece, but dilatable, the brim narrow. The forceps were tried as a last resort before craniotomy. Having applied it, I kept the forefinger of the right hand in the os to watch it and made careful traction with the left, and succeeded in delivering the woman of a living male child. The mother made a good recovery. I have done so many times since, in common, doubtless, with most practitioners.—*Dr. M. Williams, Brit. Med. Jour.*

M. PASTEUR has demonstrated his ability to confer immunity from charbon by inoculation. At the solicitation of the Society of Agriculture, of Seine et-Marne, he selected sixty animals, thirty of which were vaccinated with an attenuated virus (virus atténué), which he affirmed in advance was capable of preserving from charbon. May 30th, the sixty were inoculated with charbon. June 2nd, all the non-vaccinated animals were dead or dying, whilst the others, with one exception were perfectly well.—*Gaz. Hebdom.*

The following formulæ are recommended in "New Remedies" as useful in the administration of salicylic acid:

R_y. Acid. Salicyl.

Extr. Glycyrrhizæ Comp. āā gr. X.
M. S. Dispense in a wafer capsule.

R_y. Acid. Salicyl.

Glycyrrhizin Ammoniat. āā gr. X.
M. S. Dispense in a wafer capsule.

MEDICAL ITEMS.

It is proposed to hold a State Sanitary Convention in Baltimore next Fall.—A fatal case of poisoning from *entering a cantharides plaster* in a boy convalescing from meningitis is reported in *Br. Med. Journ.*—Dr. Robt. Bowles, of Folkstone says that the relief of stertor in apoplexy is more important than any other measure, often deciding between life and death, and that it may be accomplished by making the patient lie on the paralysed side.—Middleton, the old dramatist, speaks of anæsthesia in the following lines:

"I'll imitate the pities of old surgeons
To this lost limb—who, ere they show their art,

Cast one asleep, then cut the diseased part."

—*Med. Times and Gaz.*

The binder used before delivery is a most excellent help, supporting the back and increasing the pains.—*D. M. Williams, Brit. Med.*—July 15th is said to have been the hottest day in England since 1814.—Labbé restored a patient to life after the fatal use of chloroform, by laying a towel dipped in boiling water over the heart.—The Med. Society of the State of New York has appointed a committee to enquire what changes are advisable in the code of ethics.—In attacks of lead colic, the hypodermic injection of morphia, in doses sufficient to keep the pain in check while the iodide of potassium is doing its work, with an occasional purgative, will generally be all the treatment required.—*Hammond.*—Dr. A. S. Hunter presented to the N. Y. Obstetrical Society, May 17th, a modification of Erich's Self-Retaining Sims' Speculum.—Evelyn wrote of London in the 17th century,—"If there be a resemblance of hell upon earth it is in this volcano on a foggy day."—Several cases are reported in foreign journals of more or less improvement in the symptoms of locomotor ataxy from stretching the sciatic nerve.—Dr. Gee says that the lame-

ness, with which Sir Walter Scott was attacked in 1774, was undoubtedly due to infantile spinal paralysis. = The subscriptions to the Medical School of Harvard have already reached \$103,650.—Pres. Eliot's Address, *Cent. of Mass. Med. Soc'y.*—Gowers states that 75 per cent. of the cases of locomotor ataxy are of syphilitic origin, and Dowse, that with very few exceptions the disease can be traced to syphilis. = Manchester, Eng. is having a series of health lectures for the people, under the auspices of the Manchester and Salford Sanitary Association, upon such subjects, as Beverages, Clothing; Sick Nursing among the Poor, &c.—Eulenburg recommends the pyrophosphate as the most convenient form of iron for hypodermic use. With citrate of sodium, in watery sol., 1 to 5, it produces no irritation.—S. W. Gross recommends the use of quinine with the bromides to decrease the depression produced by the latter in asthenic subjects.—Labbé is treating a case of leprosy with hypodermic injections of carbolic acid, on the hypothesis of the parasitic nature of the disease. The improvement is said to be so great as to excite hopes of cure.—The title of Prof. Volkman's address, before the Internat. Med. Congress, was "Modern Surgery."—Up to as late as 1848 the medical lectures in Vienna were delivered in Latin.—Science fears not; nor does it hope—it does not even expect; but takes all that it finds in nature and makes it its own, trusting all, receiving all, and with equal welcome.—*Beard.*—J. S. Warren, of N. Y., says drop doses of Fowler's Solution on an empty stomach have seemed to come nearer to a specific in the vomiting of pregnancy than anything else.—*Enciente*,—i. e. ungirdled; in allusion to the ancient custom of laying aside the girdle when pregnant and placing it in the temple of the gods, at once a preparation for enlargement of the abdomen and a seeking divine protection.—*Parvin.*

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

TWO CASES OF NEURITIS OF THE ULNAR NERVE.

BY F. T. MILES, M. D.,

Professor of Physiology, and Clinical Professor of Diseases of the Nervous System, University of Maryland; member of the American Neurological Association.

Mr. G., aged about 45, came to me in September, 1879, with the following history: In the beginning of June of the same year his attention was attracted to some slightly painful sensations in the right forearm and hand, which he attributed to rheumatism. The pain increased for ten or twelve days, becoming at last so intense that he remained in bed, and the slightest movement of the arm caused great suffering. Touching or gently pressing the arm did not give pain. His medical attendant was obliged repeatedly to administer hypodermic injections of morphine to afford him relief and procure sleep. Quite early in the attack he experienced a sensation of coldness in the little finger and the ulnar side of the ring finger, which has continued more or less ever since. The part in which the coldness was felt looked paler than the rest of the hand. Anæsthesia was so great on the ulnar side of the

hand that it was pricked with a needle until blood was drawn without his feeling it. When the pain was somewhat abated and he began to make efforts to use the hand, he discovered that it was decidedly weakened. He could not write, and the attempt to do so caused pain. Very soon his attention was attracted to a loss of plumpness in the hand, a wasting which continued to increase.

When I first saw him several months after the attack, there was considerable atrophy of the thenar and hypothenar regions, and also in the palm, where the interosseous spaces were quite depressed from the loss of muscular tissue. He could not abduct the little finger, and had lost all power in the adductor pollicis, and the interossei, except the fourth dorsal, which responded feebly to the will. There was a want of power to extend the fingers completely, i. e., to bring the phalanges in a straight line.

Tested with electricity, the atrophied and paralysed muscles failed to respond to the strongest faradic current applied either to the ulnar nerve or to the muscles themselves. Galvanism of the ulnar nerve caused no contraction in the affected muscles. Applied to the muscles themselves, slight degeneration reaction was obtained from the fourth interosseous and abductor pollicis, none from the

other muscles of the hand supplied by the ulnar nerve. Sensation was profoundly implicated on the ulnar side of the hand. A very strong faradic current applied with the metal wire brush to the hypothenar region was but slightly felt, and in one spot on the outside of the little finger no sensation could be excited. The galvanic current was applied to this spot, of strength sufficient to vesiccate without its being felt. He suffered pain of no great severity in the little and ring fingers, and sometimes in the region of the elbow, but complained chiefly of a feeling of coldness in the forearm and the affected fingers, which caused him to keep these parts very warmly wrapped up, although the weather was moderate. The little finger and ulnar side of the ring finger were pale and sensibly cold to the touch. This pallor and coldness invariably disappeared for a time upon the application of galvanism.

Pressure made along the course of the ulnar nerve caused moderate pain only where the nerve lies between the olecranon and internal condyle. This point was also abnormally sensitive to the electric current. No thickening or swelling of the nerve could be perceived upon the most careful comparison with the nerve of the other arm.

The treatment consisted in the application of the galvanic current, the positive pole stationary over the nerve at the elbow, while the negative was stroked over the muscles of the hand. If a very strong current was used it caused pain in the hand after the application, which lasted for some time. The patient refused to permit the use of the cautery, which I desired to apply over the tender spot of the nerve near the elbow.

Gradually the degeneration reaction increased in the fourth interosseous, and made its appearance in the other muscles of the hand supplied by the ulnar nerve.* The voluntary movements very slowly returned, and at present he has good use of the hand, although the muscles have not recovered their natural volume. The feeling of coldness remained for a long time, but gradually passed away.

*These degeneration reactions were quite irregular in the different muscles, presenting variations from the typical form.

The second case I have to relate is that of a young lady who consulted me in October, 1879. She was an accomplished pianist, and complained that she had lost the strength of her right hand to such a degree that she could no longer perform, could no longer stretch an octave, nor strike the keys with force.

She related that about two weeks previously after executing some pieces on the piano, which required no unusual exertion, and resting for a short time, she felt as if the right hand was asleep, and was at first surprised and then frightened, that the numbness did not pass away as is usual in such cases. She went to her home and endeavored to practice some pieces but found that she had already lost power in the affected hand. She suffered no pain. When I saw her she complained of numbness which she referred to the little finger and ulnar side of the ring finger of the right hand. There was great anæsthesia over this region, as tested by pricking with a needle, and by the faradic current applied with the metallic wire brush. She complained of no pain, and there was no point of tenderness along the course of the ulnar nerve discoverable by pressure or by application of the electric current.

The muscles of the hand supplied by the ulnar nerve were affected in different degrees; all were much weakened, most notably those of the hypothenar region, which responded but feebly to the will. It was the loss of strength in the little finger especially that hindered her from playing on the piano. There was no wasting of the muscles. Faradic excitability was lost in the muscles supplied exclusively by the ulnar nerve, except one or two of the interossei, which responded feebly to a very strong current. Degeneration reaction was elicited in all of the affected muscles.

She was treated by galvanism as in the previous case, and slowly but completely recovered.

During the progress of the case, occasional slight pain was felt in the little and ring fingers. Some wasting of the muscles, most in the hypothenar region, was first observable after voluntary motion had returned in a considerable degree.

In neither of these cases could the patient fix upon any exciting cause of the attack, or refer it to any unusual or inordinate exposure or exertion. The suddenness of the invasion in the second case is very remarkable, and reminds us of the rapidity with which the spinal cord is sometimes attacked by myelitis. The second case brings out prominently the interesting fact that a lesion of the sensitive fibres profoundly affecting their power of conducting impressions, may not cause pain, that pain is not a necessary symptom of inflammation of a mixed nerve. This is an important point, as I think too much stress is often laid on pain as a symptom in neuritis, leading to error in diagnosis and treatment.

A thickening of the nerve and sensitiveness to pressure, symptoms on which great stress is laid by some as a means of distinguishing neuritis, did not appear in the second case, and in the first the pain elicited on pressure at one point was very moderate, and by no means what might have been expected in an inflamed nerve which caused so much suffering. The vaso-motor symptoms in the first case were prominent (coldness and pallor); I could detect none in the second. The fact that the wasting of the muscles in the second case began and progressed while the voluntary movements were increasing, speaks for the existence of special trophic fibres.

It is a matter for consideration how far the variations of symptoms in these two cases depends merely on the difference in intensity of the initial attack, and how far it depends on difference in kind in the morbid processes themselves, processes which may primarily attack the nerve sheath, or nerve fibre, or both, in varying combination.

Affections of peripheral nerves are much more frequent, and have consequences much graver than are generally supposed.

For some years back the attention of observers has been arrested by a class of cases, which, while they show the general marks of spinal cord disease, nevertheless present symptoms difficult to reconcile with any known pathological condition of that organ.* These cases

resemble in their features poliomyelitis, lesion of the anterior horns of grey matter of the spinal cord ("infantile paralysis," and the similar affection in the adult). Like poliomyelitis, they may be acute or chronic. They present the same paralysis, with wasting of the muscles, and the paralysed muscles present the same phenomena of loss of faradic contractility, with increased readiness to reply to the galvanic current ("degeneration reaction"). A very important symptom in these cases is the occurrence of pain, spontaneous, or caused by pressure, numbness, formication, &c., symptoms which speak plainly for the involvement of the sensitive tract, either in the nerves or spinal cord; a condition at variance with what we should expect in a disease located in the anterior horns, which are motor. In many such cases, moreover, recovery takes place with a completeness and rapidity which could hardly be expected when there are lesions of the spinal cord such as have been found in infantile paralysis and the similar affection in the adult. In spite of this, however, so great an interest has been of late years excited by the successful study of the pathological anatomy of poliomyelitis, that most of such cases have been, from their general resemblance, without sufficient scrutiny, classed under the head of that disease, or by the less instructed practitioner, without scrutiny at all, thrown into that waste basket for puzzling pains, "rheumatism."

The study of neuritis, clinically and experimentally, has meantime occupied some of the best observers of Europe, who have now and again raised the question, if we were not too exclusively looking to the cord for the seat of lesion in all cases of paralysis and wasting of muscles, and who have attempted to show how much more completely, in some cases, the symptoms were covered by the hypothesis of lesion of peripheral nerves. Clinical observations controlled by post-mortem examination have accumulated, and there can now be no doubt that in many cases of so-called poliomyelitis the lesion is in the peripheral nerves, and not in the cord. Neuritis may strike many nerves at once with but slight, if any,

*See case of extreme muscular atrophy, published by me, 1877.

prodromal symptoms,* thus resembling the invasion of poliomyelitis. Its course may be acute, rapidly paralysing the limbs affected, and with the phenomena of muscular atrophy and degeneration reaction. It may attack in succession the lower and upper extremities, and finally destroy life by implicating the cranial nerves (pneumogastric, hypoglossal), giving the outward appearance of Landry's paralysis. It may have a chronic course (and this is probably the most frequently seen), gradually invading nerve after nerve, and simulating progressive muscular atrophy.† It is probable that most of the cases classed under Duchenne's "Paralysie générale spinale antérieure diffuse subaigue," which are ushered in by pain, anæsthesia, numbness, formication, &c., are really cases of neuritis. The whole subject has been discussed and elucidated with great force by Leyden, of Berlin, in the article of his already alluded to. It is necessary to press the importance of a diagnosis between a disease of the peripheral nerves and one of the spinal cord, both for prognosis and treatment.

NOTES ON TWENTY-SEVEN CASES IN WHICH THE INTRA-UTERINE DOUCHE WAS GIVEN IN THE MATERNITY HOSPITAL, BALTIMORE.

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(Read before the Section on Obstet. and Gynecol. Med. and Chir. Fac. of Md., May 27, 1881).
(Concluded).

CASE 17.—M. S., confined Feb. 3d, '79; single; primipara; 1st stage 48 hours, 2d stage 3 hours, 3d stage 25 minutes; chloroform and morphia used in the first stage, and ergot after 3d stage. 2d

*In a case recently treated by me, it began almost simultaneously in the feet and hands, with numbness, which gradually advanced up legs and arms. Loss of muscular power, with atrophy and flabbiness of the muscles of the legs rapidly developed, with loss of faradic contractility and degeneration action. Bladder not affected. Pain on pressure of the muscles well marked. After a short time improvement set in rapidly, and at this time only a little weakness remains. No cause for the attack could be assigned.

†Leyden "Ueber Poliomyelitis und Neuritis" in *Zeitschrift für Klinische Medicin*, 1880.

day, t. 104°, pulse 114; intra-uterine injection was given, which brought down the t. to 100.6°; quinia was used in tonic doses. 3d day, t. at 8 A. M., 99°; 2 P. M. 104°, pulse 116; uterine douche again reduced t. to 100°. 4th day, t. 102.6°; no pain; slight tympanites. 5th day, t. 104°, reduced by the douche to 100.5°. 6th day, A. M., t. normal; P. M., 103°; douche was followed by the same reduction of t. 7th day, no rise of t. 8th day, t. 106°, pulse 120. Gave quinia gr. x and carbolic acid gt. j every 4 hours. T. and pulse became normal, and did not rise again. Patient resumed nursing, and left hospital March 17th.

CASE 18.—L. M., confined April 23d, 1879; single; primipara; length of labor 12 hours; chloral and chloroform were used. A segment of membrane was left behind, which was subsequently removed by the introduction of the hand into the uterus. 2d day, uterus did not contract well; there was slight hemorrhage, which was arrested by hypodermic injections of ergot. 3d day, slept well; lochia normal; milk established. 4th day, 8 A. M., slight uterine tenderness; rapid rise of t. to 105.5°; gave quinia in large doses; 5 P. M., lochia offensive; gave douche. 5th day, 8 A. M., quinia continued; pulse was reduced from 116 to 70 by tinct. veratrum, gtt. viij, and $\frac{1}{2}$ gr. morphia, but it produced vomiting; 3 P. M., gave $\frac{1}{2}$ grain morphia hypodermically, which induced sleep; 6 P. M., administered intra-uterine douche, after which she again slept. 6th day, t. at 1 P. M. 103°; lochia offensive; douche brought away decomposed clots; 8 P. M., repeated douche, t. reduced to 101°. 7th day, slept well; at 8 A. M. t. 99.5°; lochia still abnormal, douche; 8 P. M., gave douche and $\frac{1}{2}$ gr. morphia. 8th day, uterine tenderness, lochia foetid; used douche in morning and evening, and gave $\frac{1}{2}$ gr. morphia. 9th day, 8 A. M., slight abdominal tenderness, vomiting, t. 104°; lochia foetid, douche used morning and evening, quinia given; oxalate of cerium allayed the emesis. 10th day, 8 A. M. t. 101°, tenderness continued, lochia improved; took plenty of nourishment. 11th day—spent a restless night; lochia again arrested; t. began to rise at 10 A. M., and at 2 P. M. was 103°; 5 P. M., gave chloral-hydrat. gr. xv, which

induced rest and sleep. 12th day, t. rose to 104.5° in the evening; quinia, the douche and morphia at night constituted the main features of the treatment up to 16th day. She convalesced slowly, and left the hospital in fair condition May 29th.

CASE 19.—E. D., confined June 29th, 1879; single; primipara; age 19. 1st stage 27 hours, 2d stage 2 hours, 3d stage 20 minutes; forceps used. 2d day, uterus well contracted, catheter used, lochia normal, secretion of milk free; vaginal douche given twice daily. 3d day, 8 A. M., slight rectal tenesmus; 6 P. M., offensive lochia; gave intra-uterine douche. 4th, 5th and 6th days, the lochia continued the same, t. 101°, pulse 100 nearly all the time, except on the 5th day it became 104°, pulse 140; the uterine douche was kept up once a day. 7th day, lochia slight and less offensive, t. 99°. 8th day, sat up an hour. 9th day, improving. Left hospital in good condition August 1st, 1879.

CASE 20.—J. H., confined Nov. 24th, 1879, at 8 A. M.; single; primipara; previous health good. 1st stage 5 hours, 2d 1 hour, 3d 15 minutes; post-partum hemorrhage followed; uterus after the flooding was well contracted; pulse was small and rapid; at 5 P. M. there was a slight hemorrhage. 2d day—rested well during the night, lochia normal, t. 98.5°; pulse 115. 3d day—rested well, very weak. 4th day—lochia normal, pulse 120, t. 100°. 5th day—tenderness over uterus, evening t. 104°, pulse 130. 6th day—A. M., pulse 112, t. 101°; P. M., pulse 144, t. 103°. 7th day—t. 103, pulse 140. 8th day—t. 101°, pulse 120. 9th day—A. M., t. 102°, pulse 130; gave intra-uterine douche at 9 A. M., which was followed at once by a slight reduction of t.; patient said she felt much better from the use of it. 10th day—slight epistaxis, t. 102°, pulse 130; had an offensive stool containing blood. 11th day—8 A. M., t. 103°, pulse 134; 12 M., t. 101°, pulse 128; 2 P. M., t. 100.5°, pulse 124. 12th day—pain in breathing; t. 101°, pulse 128. 13th day—pulse rapid and weak, t. below normal. Died at 8.30 A. M.

Post Mortem: Purulent, fibrinous material throughout the peritoneal cavity; between the cervix and rectum on the

left side was an abscess; uterus contained a mass of offensive detritus.

CASE 21.—M. H., confined April 12th, 1880; married, but deserted by her husband; age 23. Chloral used in first stage. Did well until 4th day, when t. rose to 102.5°, pulse 100. 5th day, t. 104°, pulse 104; gr. xii quinia every four hours and the carbolyzed intra-uterine douche. The reduction of t. was gratifying, but the cinchonism was unendurable; salicylate of soda in 20 gr. doses was substituted; this proved objectionable in 24 hours on account of the profuse diaphoresis and quinia was resumed in smaller doses. An abnormal elevation of t. was kept up until the 15th day, when it was reduced to 98.5° and pulse 70. She was discharged May 10th.

CASE 22.—R. P., confined May 25, 1880; single; seduced; age 19. Chloral and morphia were used during labor. 1st stage 10 hours, 2d stage 2 hours, 3d stage 1 hour. Placenta adhered firmly and was with difficulty removed. Carbolyzed cloths were applied over the genitals. T. rose in the evening to 102°; gr. x quinia, and in 2 hours gr. xx had no antipyretic effect. Salicylate of soda was given to no purpose. Tinct. veratrum produced vomiting, and tinct. aconite was substituted for it. An ice cap was applied to the head. The intra-uterine douche was given for the first time at 9 P. M., on the 4th day, when the t. was 105°; at 12 M. it was reduced to 100°. 5th day—chill; t. up to 104°; an eruption appeared on the hands, in the bends of the elbows and on the neck; the throat was red and sore. The case was diagnosed puerperal scarlet fever. 7th day—chill, followed by a t. of 106°; the eruption was very full, especially on the body and neck. Died at 10.40 A. M. on the 8th day.

Post mortem: os gangrenous up to the internal constriction; the whole interior of the uterus was highly inflamed, and in spots gangrenous; the right side of the os was slightly lacerated; the parts in juxta-position to the uterus, on the right side, were much congested; the peritoneum resting on the uterus was not inflamed. It is noteworthy that the patient complained of no pain and there was no tenderness on pressure. But for the light of the post-mortem we would

have attributed this case to scarlet fever.

CASE 23.—S. J., confined May 26th, 1880; age 23; married, but deserted; 1st stage 8 hours, 2d stage $\frac{3}{4}$ hour, 3d stage 20 minutes. Chloral, gr. xlv, was used in the first stage. Did well until the fifth day, when t. became 102° , pulse 98; lochia was arrested and she had a chill. 6th day—t. 103° , pulse 96; carbolyzed uterine douches were used on the 6th, 7th and 8th days. The case proved to be one of malarial fever, and was cured by quinia.

CASE 24.—M. B. confined September 3d, 1880; single; age 19; child, male; weight $8\frac{3}{4}$ lbs.; labor normal. The placenta was removed by kneading. The uterus remaining large the hand was introduced to explore, and brought away a piece of the membrane and part of the placenta. 2d day—t. 103° , pulse 112; the uterine douche was used morning and evening; quinia was given. 3d day—was attacked with diarrhoea, which kept up more or less elevation of t. and pulse. She left hospital October 12th.

CASE 25.—E. S., confined September 17th, 1880; single; age 23; 1st stage 3 hours, 2d stage 1 hour, 3d $\frac{3}{4}$ hour. The labor presented nothing unusual except that kneading the uterus would not bring away the placenta, and it was removed by introducing the hand. 2d day, the t. was 104° , pulse 140; gave uterine douche and large doses of quinia; t. was reduced in a few hours to 100° , pulse 104. Left hospital October 10th.

CASE 26.—M. H., confined September 19th, 1880; single; age 25; good previous health. 1st stage 5 hours, 2d stage $2\frac{1}{4}$ hours, 3d stage 1 hour. There was delay about the delivery of the afterbirth; it would not come away by kneading, but was detached by the hand at the end of an hour. Several pieces of placenta were subsequently removed, and a uterine douche of solution of permanganate of potash was given. The perineum was slightly ruptured. 2d day, t. $102\frac{3}{4}^{\circ}$, pulse 120; used quinia and vaginal douches of the permanganate every four hours. In giving the uterine douche it was discovered that patient had a rupture of the neck of the uterus one inch deep. On the 6th day an ugly ulcerated surface was found on the labia, extending from the post. commissure upwards one inch.

A cloth soaked in carbolyzed glycerine was applied between the labia and changed every 3 hours; quinia and vaginal douches were continued. Progressed well until 13th day, when her t. became 106° ; this was due to the annoyance given her by a fretful baby. She convalesced slowly, sitting up for the first time on the 35th day.

CASE 27.—J. S., confined December 8th, 1880; single; primipara; age 26; previous health poor. 1st stage 3 hours, 2d stage $\frac{1}{2}$ hour, 3d stage $\frac{1}{2}$ hour. Condition good until 3d day, when t. became 103° , pulse 140. Her symptoms were chilliness, nausea, vomiting, nervousness, pain, tenderness over abdomen, coated tongue, loss of appetite, and at one time troublesome diarrhoea. Carbolyzed uterine douches every 4 hours, together with antipyretics, constituted the treatment during two days of rapid t. and pulse; subsequently they were used only twice daily. Facial erysipelas covered the face and scalp: this was subdued in a few days. She convalesced rapidly, and left the asylum against advice of the physician December 27th.

The intra-uterine douche has been used in the Maternité with uniformly good results during a period of five years. It has been given in many more cases than are here recorded under my personal supervision, but I have limited my narration to cases fully reported on the books of the institution.

In some of the cases the douche seemed to subserve no good purpose, in others it was used together with other therapeutic measure and it is difficult to decide what share of credit is due to it. In other instances I am confident it was preventive and curative in its results. Our experience is limited to the use of carbolic acid and permanganate of potash, preference having been given generally to the former.

The douche should be administered with one of two definite ends in view: 1. The prevention of septicæmia. 2. Its arrest and cure.

Prevention here, as in all other departments of medicine, should take precedence of methods of cure. The action of large doses of quinia in arresting and controlling the septic process, if given early and before the general systemic

contamination, is a conceded fact. It is none the less true, that uterine douches avert and arrest a septicæmia, when administered properly and in time. Almost invariably there is a group of symptoms, which forewarn us of the approach of this disease. They are: rapid pulse, elevated temperature, imperfect retraction of the uterus, and abdominal tenderness. A nice appreciation of the normal changes and phenomena which take place in the female economy immediately succeeding labor, will enable us to quickly perceive unfavorable indications. After the excitement and struggles are over, the pulse should become full, soft and slow. There is in the large majority of normal cases a subsidence below the usual pulse of from 15 to 25 beats, which continues during the period of greatest liability to septic absorption.

The poverty and consequent mental worry, the circumstances of seduction, desertion, anxiety for the future, the disappointment and disgrace, to say nothing of the disadvantages of hospital atmosphere and surroundings, interrupt this law as applied to our cases. The state of the pulse in lying-in hospitals has long been considered a guide to comfort or excite apprehension as to the newly confined. The temperature in normal cases should show a slight elevation during and a short time after labor, but in a few hours it should regain its wonted level. In about 48 to 60 hours after labor, when the milk function is first established, there is an elevation, which is transient, of from $\frac{1}{2}^{\circ}$ to 3° . If there is a continuous elevation of temperature over 100° , with a pulse over the norm, we have already occasion for solicitude.

The third precursory symptom, i. e., imperfect uterine retraction, is by no means uncommon. Of the twenty-seven cases I have just described, fifty per cent. manifested this condition. It is to be presumed that every physician is familiar with the law of uterine involution. After every confinement he should place his hand on the uterine globe, to inform himself as to whether it is conforming to this law. The size, situation and degree of contraction, will often point to the presence of a part of the placenta, a segment of the membranes

or clots. Whether subinvolved from the presence of foreign material or from other causes, the dangers to the woman are greatly increased.

The fourth symptom of my group, abdominal or rather hypogastric tenderness, is all that is necessary to complete the picture of impending septicæmia. These early indications call for the intra-uterine douche, as the surest and *best* therapeutic agent, which can be resorted to, to remove the offending matter, to check the continuous absorption of the poison, and to aid the powers of elimination. Most of our cases are illustrations of the arrest and cure of septicæmia. They would have been more rapidly efficient, and I doubt not more successful in saving life, if they had been resorted to earlier and given in the way we have adopted as the result of our experience. Rapid pulse, high temperature, subinvolution and tenderness, are sufficient to warrant the use of the uterine douche. In most of the cases herein discussed the symptoms enumerated as premonitory, had existed for some time and there was superadded either suppression of lochia, or purulent or fetid uterine discharge and tympanites, delirium and other indications of constitutional impress. An objection urged against the use of the intra-uterine injection is that it displaces the thrombi and causes hemorrhage. Thrombi so easily displaced are but inefficient plugs. There is no more efficient hæmostatic agent than hot water, which has achieved a considerable popularity in post-partum bleeding. It acts by stimulating uterine contractions and rendering more secure the placental vessels. It is a rational and good treatment during the first hours or even days after labor, when the uterus is subinvolved, to throw into it a warm douche containing the virtues of a disinfectant and astringent. The permanganate of potash fulfils this indication. A well-known authority claims that he has seen a reduction of two or three inches in the size of the uterus, in a few hours, from an intra-uterine douche. It has not been my good fortune to realize such results. I believe that if such a change is practicable, it is only when used early before metritis has set in. I am satisfied that the dangers of

the douche have been greatly exaggerated. By its proper use we promote retraction, remove foreign and putrid material, prevent decomposition, constrict the placental site and all abrasions. Cases 8, 16 and 25, show how, under immediate local antiseptic management, gangrenous and sloughing vaginas were rendered healthy. In the first and last there was prompt arrest and recovery; in the second sloughing of the vulva was checked, but that in the uterus was not controlled by our treatment and death ensued.

I have no hesitancy in accepting in obstetrical cases the principles of Listerism. I believe it a good routine practice to use disinfectant vaginal douches. The instrument used at the Maternité was either a Davidson or Fountain syringe, having a male catheter attached to it by a piece of rubber tubing. It is claimed for the latter that there is less liability in its use of forcing air into the uterus.

The instrument I now use works on the plan of the nasal douche. The can is made of zinc, (as the carbolic acid corrodes tin,) and has a capacity of one-half gallon. It has 6 feet of rubber tubing, a hard rubber stem with a slight catheter like bend, a large bulbous end, and a watering pot arrangement of the jets. With this instrument there is the least possible danger of over-distension, the introduction of air, or of the injection going into the uterine sinuses. The physician's hand should always guide the stem and realize accurately its position in the cavity of the uterus. The douche should be given by a slow, continuous current in large quantity, and repeated every two, three or four hours, according to the circumstances of the case. It were well to repeat it every two hours in complete arrest of lochia and when there is evidence of gangrene.

In advocating thus strongly the use of the intra-uterine douche, I do not wish to be understood as advising a dependence on it alone. The assistance of antipyretics must be invoked—chief among them quinia, salicylate of soda, morphia, alcohol, carbolic acid and sulpho-carbolate of sodium. The ice-cap, sponging, tinct. aconite, tinct. veratrum, and the administration of liquid nourishment, are not to be overlooked.

THE OCCURRENCE OF STRANGULATED EXTERNAL HERNIA, UNKNOWN TO THE PATIENT.

BY L. MC LANE TIFFANY, M. D.,

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No fact in surgery is better known, or more fully recognized, than that the mortality following herniotomy bears a direct ratio to the length of time during which the protruding viscus has been strangulated. It is an experience most distressing to the operator, and much too often met with in practice, to be informed, when summoned, that symptoms of grave mischief have been present for some days, and yet relief has not been sought for, by the only method possible under the circumstances, namely, cutting.

In a certain proportion of cases, but I believe in a very small proportion, it is possible that some blame may rest upon the shoulders of the attending physician, through his failure to appreciate the indications for treatment sufficiently early from inattention or otherwise; but far more often the fault lies with the patient, whose appreciation of local trouble is blunted by severe general symptoms, so that, disregarding the hernia, or indeed ignoring its existence, the sufferer takes medicine for supposed colic, thus wasting time while the bowel melts away under the constricting band.

This condition of affairs is more apt to be met with in the less affluent portion of a community among the working classes, who are accustomed to treat their own minor ailments without seeking professional aid. A number of instances have fallen under my observation where the patients, although aware that they were ruptured, accustomed to the descent of the bowel and to replace it themselves, were ignorant of the presence of a tumor in the usual locality until

informed of the fact by the medical attendant, and yet at the time strangulation existed. Excluding cases of unsound intellect, it is evident that such a state of affairs is most likely to be present when the hernial tumor is of small size and deeply situated; indeed, it is the rule in thyroid and sciatic ruptures, while of the two common varieties, inguinal and femoral, it would be expected to be found more often in the latter. There is, however, in femoral rupture another reason why its presence may elude the patient's observation, namely, that strangulation is apt to be very acute, and the onset of general disturbance correspondingly rapid, thus drawing attention from the seat of trouble.

It is a clinical fact worth noting that, of four cases observed, three occurred during the heat of summer, a period of the year, when, in this locality, the abundant supply of fruit, and the small cost of the same, enables the inhabitants cheaply to gratify their appetites and suffer from colic, a circumstance excusing somewhat failure to recognize the real cause of illness on the part of the sufferer.

A. J., negress, æt. 70, had suffered from right femoral rupture for many years. She had borne many children.

One day she complained of pain in the umbilical region, and took a dose of oil. The pain not being relieved, she had recourse to some household remedy; failing still to gain relief, she applied to a physician, who gave her a prescription but very little attention. The bowels were constipated and she vomited several times during the next three days, complaining always of pain about the umbilicus and nowhere else; the pain was not, however, severe. She died on the seventh day after first complaining.

The body came into my hands after death, and I obtained the above history from her friends, who were with her during the last illness. On no occasion did she complain of, or call

attention to, the groin. There had been no suspicion that hernia had had anything to do with her sickness. Subsequently the physician, whom she had consulted, told me the same thing.

On dissection, I found a right femoral hernia, strangulated; about an inch and a half of the gut was involved, its entire calibre being constricted. The bowel had not given way along the line of pressure.

In this case, failure on the part of the physician to appreciate the gravity of the case was due to inattention, for the patient applied for some medicine to "open the bowels," not, so I was told, on account of any special train of symptoms, and failing to obtain the desired relief did not again seek medical aid. It is probable, also, that, in the last day or two of life, profound depression, owing to very advanced age, obscured the signs of fatal trouble. The necessity for careful examination by a physician is well illustrated and scarcely needs comment.

K. A., white, female, æt. 50 years, wife of day laborer; mother of several children, suffered from pain referred to umbilicus and constipation. She took a domestic remedy and failed to obtain relief. On the third day of illness she purchased some purgative medicine at a drug store, took it and was not relieved. Then she applied to a physician, who questioned in regard to hernia, being assured that there was a rupture in the right groin but that it gave no trouble ever; an examination was insisted on and a right femoral hernia found strangulated. This was in the evening of the fourth day. I saw the patient the same night; failed to reduce by taxis and advised at once an operation. This was declined, and I heard no more of the patient until the obituary column of the daily paper, three days later, supplied information. The physician who attended believes that death resulted from peritonitis due to giving

way of the bowel at the constriction.

This patient suffered from strangulation for four days, and, though aware of the fact that she was ruptured, suffered no pain in the groin, at least not more than usual, declining manual examination until peremptorily demanded by her medical attendant when called upon for advice. Chance of recovery by operation was slim when I saw K. A., for peritonitis had set in, but the little hope remaining was effectually crushed out, when the patient declined to be operated upon, not believing that a mortal bowel constriction could exist without great pain.

H. M., æt. 37, white, wife of shoemaker, mother of several children, had a reducible rupture in the right groin.

She was attacked with cramps, vomiting and constipation. After suffering seven days, she consulted a physician, who at once made an examination; found a right femoral hernia strangulated, and asked me to see the case. I found the patient profoundly collapsed, the belly greatly distended and tender, pulse 146 to the minute, but she had suffered no pain during the past two hours. The hernial tumor was not crepitant. The patient had not been aware that the rupture was "down" until so informed by her physician. During the next twenty minutes the pulse became almost imperceptible. I declined to operate, and the patient died very shortly after I left her room. No *post-mortem* examination was allowed.

I deeply regretted not seeing this patient sooner. She was a most favorable subject for operation, spare, well nourished and healthy. The entire sudden cessation of pain, indicative of approaching death, was accompanied by a dilation of the pupils, and brilliancy of the eyes which was very remarkable. Once before I have noticed the same cessation of pain, and brilliancy of the eyes preceding death; I observed them in a man who com-

mitted suicide by drinking muriatic acid; his stomach was perforated, and acute general peritonitis existed. It is probable that rupture of K. M.'s bowel had taken place along the line of pressure.

Mrs. B., æt. 55, wife of a carpenter, mother of adult children, spare, of regular habits, had a femoral hernia of the right side for many years; it always disappeared when she laid down.

6 A. M., April 17th, she was taken with persistent vomiting and pain in abdomen. Domestic remedies were used until the following evening (April 18th), when a physician was summoned. Examination of groins showed a strangulated right femoral hernia. An attempt was made under chloroform, which failing, I was asked to see the case. Failing to reduce under chloroform, I operated and the patient recovered.

Until the physical examination was made by the physician the patient was unaware of any swelling in the groin, supposing that she was suffering from indigestion due to imprudence in diet.

This patient did not delay more than a day before consulting her family physician, a circumstance to be accounted for, perhaps, by the fact that she was the most intelligent of the four individuals whose cases are here related. None the less, however, was she totally unaware that her rupture had "come down," and was irreducible, and had the abdominal suffering not become unbearable, she would doubtless have travelled the same route as cases 1, 2 and 3.

It is worthy of remark that each patient had femoral rupture, and of the right side; that three of the four complained of, and referred the pain to, the immediate region of the umbilicus; in neither did the rupture form a large tumor.

All were unaware of the danger attending their ailment, and, indeed, of what was the cause of their suffering until told by a physician.

It is difficult to find a suitable explanation for an existing strangulation unaccompanied by pain at the seat of mischief. In an article entitled "Observations upon Strangulated Hernia" (*Maryland Med. Journal*, August 1st, 1880), it is suggested that peritonitis is less apt to follow herniotomy for old ruptures than recent, because much rubbing at the mouth of the sack renders the peritoneum somewhat tolerant of manipulation; if the same reasoning be applied to an habitually protruding bowel, we may have an explanation for the absence of local pain.

The lesson to be learned from the above histories is very simple, namely, to examine for strangulation in the ruptured whenever digestive troubles of an acute nature make their appearance as a matter of course; but also, and that which is of greater importance, perhaps, is to explain to sufferers from hernia what strangulation is, the varied symptoms announcing its occurrence, and the immediate necessity which exists for medical aid.

CLINICAL LECTURES.

GUNSHOT WOUNDS.

A CLINICAL LECTURE DELIVERED AT THE
UNIVERSITY HOSPITAL ON AUGUST
4TH, 1881.

BY RANDOLPH WINSLOW, A. M., M. D.,

Demonstrator of Anatomy, University of Maryland, One of the Surgeons to the University Hospital.

As we have had an unusually large number of injuries from fire-arms in the hospital during the past month, I think a short time may be well spent in the consideration of the cases which have been under our care as well as in reviewing some of the points in which this class of injuries differs from those produced by other agents. "Gunshot injuries," writes Prof. Longmore, "are injuries which result from the action of missiles set in motion

by a force which is derived from the ignition of explosive compounds. They comprehend every kind and degree of hurt which is capable of being produced on the human frame by the mechanical impulse of obtuse bodies" (Bryant's Surg.). From this comprehensive definition, we see that all injuries from fire-arms are called gunshot wounds, whether they have been inflicted by a cannon or a toy pistol; hence we naturally expect to find every variety of hurts, from a mere scratch or contusion to the most frightful mutilation of the body. We would also be keeping within the definition of Prof. Longmore in referring the various injuries, caused by blasting, to the general class of gunshot wounds. In military practice severe mutilation is common, but in civil practice, as wounds are usually produced by pistols and shotguns, much laceration of the tissues is rare; some wounds inflicted by a full load of small shot are, however, attended by much destruction of the tissues. Pistol wounds are not generally very dangerous, except when vital organs have been injured, as the brain or the abdominal and thoracic viscera. On the 4th of July there were more than twenty casualties in this city from small arms, with only two deaths, one being instantaneously produced by a bullet passing through the brain; the other resulted fatally in a few hours from wound of the thoracic organs. The appearance of gunshot wounds will vary with the size, shape and velocity of the projectile, and will depend much also upon the portion of the body which is struck, as well as upon the position of the person at the time of receiving the injury. A bullet impelled at full speed will penetrate the tissue cleanly, and the aperture of entrance will be small and circular, with inverted edges; the aperture of exit is usually larger than that of entrance, and is more contused and lacerated, having everted edges. The

track of the bullet will also be nearly straight, and about the same size as the entrance wound. When the bone is struck it is usually shattered in every direction, and this is especially apt to follow wounds from the conical ball, now so much in use; the old, round musket ball was not nearly so destructive, as it frequently penetrated bones, without splintering them. The wound from a bullet going at a reduced rate of speed will be more irregular, contused and larger than that from one at full speed; whilst that from a spent ball may cause but little injury to the skin, and yet crush and pulpify the deep seated parts. All gunshot wounds are followed by suppuration and sloughing, hence healing by the first intention is impossible, though that produced by a bullet at a high rate of speed more nearly approaches an incised wound. After a period of suppuration and sloughing, the injury is repaired by granulation. The fact that gunshot wounds are followed by sloughing led Prof Chisolm, during the war, to advocate converting some of these injuries into incised wounds by operation, and so to obtain quicker healing (*Confed. States Med. and Surg. Journ.*). One point of importance in the history of gunshot wounds is the occurrence of shock. Whilst there are many exceptions to the rule, wounds from fire-arms are generally followed by shock, and when a vital organ is injured the shock is usually very great. We are all familiar with the extreme shock and collapse of the President, upon receiving his wound, which led to the supposition that the liver and other abdominal viscera had been penetrated, though it is now considered doubtful whether the ball entered the abdominal cavity at all. Much primary hemorrhage is not common in gunshot injuries; the larger vessels being elastic, and surrounded by loose connective tissue, are pushed out of the way by the missile without causing

hemorrhage. Upon the battle-field the larger vessels are sometimes divided, causing a rapidly fatal hemorrhage. When a limb is shot off there is not much bleeding, the arteries being sealed by their laceration in the same manner as in severe injuries from machinery. Secondary hemorrhage is common in gunshot injuries, from the sloughing of the bruised vessels, and it is not to be expected until the lapse of several days. In general terms the pain following gunshot injuries is not severe, but this depends upon the part wounded. The boy before us says he experienced no pain upon the receipt of his injury, and only a feeling of soreness afterwards. Foreign bodies, as pieces of cloth or fragments of bone, are frequently pushed ahead of the ball, and render the wound larger and more contused; sometimes the projectile simply pushes the clothes into the flesh without tearing the fabrics, and is held like a finger in a glove, in which case the ball will be extracted by pulling out the pouch of clothing. The first duty of the surgeon is to minister to the immediate wants of his patient; if collapse be present, an effort should be made to restore the equilibrium of the circulation by the judicious use of stimulants, and by rest in the horizontal position; if hemorrhage exists an effort should be made to arrest it by means of the ligation or torsion of the vessels, or by well adjusted pressure. Having attended to the immediate necessities of the case, the next indication is to form a diagnosis of the course and position of the ball, and of the damage done to the tissues; hence the surgeon's first duty is usually to explore the wound, and when the opening is large enough the finger is the best probe for the purpose, as it is jointed and will follow the sinuosities of the track more readily than a metallic probe, besides being able to discriminate the different tissues and the missile by the

sense of touch. Billroth says a ball can be rarely extracted which cannot be reached by the finger. When the track is too small, or too tortuous and long to be explored by the finger, a Nelaton's probe, or other flexible or jointed probe may be used, as Sayre's vertebrated probe.

Wounds of the cranial, thoracic and abdominal cavities should be investigated as little as possible. If the bullet can be found it ought generally to be extracted, but sometimes it is so imbedded in the tissues, or so much altered in shape from its impact with the bone, that it could only be removed at the risk of injury to important structures, in which case it had best be allowed to remain. In many cases the ball cannot be found; if it is imbedded in the bone, it will probably become encysted, but may cause suppuration and an abscess, when it remains in the soft parts, which would indicate the location of the foreign body, and allow an attempt at its removal.

CASE I.—Pistol Wound of Abdomen—Recovery.—Isaac Custis, 29 years of age, was shot on the afternoon of July 4th. The ball entered the left side of the abdomen at a point $1\frac{1}{2}$ inches from linea alba, and 3 inches from the umbilicus, making a clean circular hole in the abdominal wall about the size of the end of the little finger, through which about an inch of omentum protruded. There was no hemorrhage and but little pain; temperature normal; pulse 80, full and strong; but little shock. As I was unable to replace the omentum it was ligatured, and the redundant portion cut off. A drainage tube was introduced, the wound being slightly enlarged for the purpose, as the opening through the aponeurosis of the external oblique muscle was slit-like and did not permit the passage of a large tube. Two ice bladders were applied to abdomen, and a rack placed over the belly to bear the bed clothes.

Opium was ordered in grain doses every three hours. A soft rubber tubing introduced into the bladder showed it to be empty, and he admitted that he had urinated at the station house. There is but little to note in the case until the third day, at which time his temperature rose from 99° in the morning to $101\ 3\text{--}5^{\circ}$ in the evening; pulse 126, respiration 32; the abdomen at the same time became very tympanitic, but was hardly painful on pressure. The onset of peritonitis was feared, but the next morning the temperature had fallen to $99.4\text{--}5^{\circ}$, the pulse to 104; the maximum temperature afterwards was $100\frac{1}{2}^{\circ}$ on the seventh day, the pulse also dropped continuously to 80, and never became more than 84 afterwards. On the thirteenth day the temperature was $98.3\text{--}5^{\circ}$, pulse 50, respiration 16. From this time temperature and pulse were almost normal, and on the twenty-sixth the thermometer indicated $98.2\text{--}5^{\circ}$, the pulse 68, respiration 18. The depression of the pulse on the thirteenth day was probably caused by the continuous application of the ice bags, which were removed about this time, and not until he began to feel uncomfortable from their use. On July 10th, six days after the receipt of the wound, the bowels moved spontaneously, and the tympanites began to subside. The opium was continued about two weeks. A marked feature in the case was the absence of pain, the man only complaining of a feeling of soreness. He left the hospital on August 4th, exactly one month from his admission. Several points of interest are brought up by this case, and the first is: What tissues were injured? As far as I can judge, the ball was spent in passing through the thick abdominal walls, and did not injure any of the intestines. When the abdominal viscera are wounded the shock is generally very great, and the absence of it in this case (notwithstanding he was handcuffed and forced to walk

some distance to the police station) lead to the opinion that the viscera were not wounded. The ball probably gravitated into the pelvis, and may eventually ulcerate into the rectum or bladder; in the former case it will pass out with the feces, in the latter form the nucleus of a calculus; at least such results are not uncommon. What were the dangers to be apprehended in this case? Leaving out the probability of hemorrhage, which was slight, the chief danger to be feared was peritonitis; this would occur about the third day, and the rise of temperature and pulse at that time made us very uneasy; fortunately the inflammatory action, if present at all, was very localized and soon subsided. Septicæmia from the collection and absorption of septic discharges was also to be guarded against, and this was done by the introduction of a drainage tube, through which the retained secretions might be discharged and the cavity washed out if necessary. There was no evidence of septicæmia in this case. One point of caution, I think, comes in well at this time especially, in regard to the treatment of gunshot wounds of the peritoneum. At the late meeting of the American Medical Association, Dr. Hunter McGuire read a paper upon "*Operative Interference in Gunshot Wounds of the Peritoneum*," in which he advocated, in penetrating wounds of the peritoneum, with or without visceral injury, enlarging the wounds or opening the linea alba freely enough to allow a thorough view of the injured parts. Bleeding should be arrested, and blood and foreign bodies carefully removed. If the intestines are wounded the lacerated edges ought to be trimmed and closed by animal sutures. If the wound does not ensure free drainage a counter opening in a dependent position should be made, and a drainage tube introduced and the cavity flushed with carbolic lotions. He believed these injuries

to be usually fatal, "and that the patient will exchange an almost certain prospect of death, for at least a good chance of recovery." He closed with the remark that "if it is urged that the means suggested are desperate, it can be said in reply that the evil is desperate enough to justify the means." Dr. Sims, you will remember, is also reported to have said that if the President's attending surgeons were satisfied that the ball had penetrated the abdominal cavity he should be treated as a case of ovariectomy, the abdomen opened, vessels ligated, drainage established, etc. Now whilst I believe this would be good treatment in some severe lacerated wounds of the abdomen, with injury to the intestines or other viscera, I think it must be practised with much caution in such cases as come under the notice of the surgeon in civil practice; and in cases where the wound is small and clean, and the evidence of intestinal or visceral injury is not clear, I do not think such radical treatment should be undertaken.

CASE 2.—*Toy Pistol Wound of Finger—Tetanus—Death*.—Mike Reis, 17 years of age, was injured by a blank cartridge discharged from a toy pistol on July 3rd, the middle finger of the left hand being slightly lacerated. He followed his usual occupation, that of driving an ice wagon, until July 9th, when acute tetanus set in. He was admitted to the hospital on the evening of July 9th. The wound was rather sloughy, but not bad looking, the finger red and swollen, and suppurating moderately. Tetanus supervened about 11 A. M. on the 9th. Upon admission there was opisthotonos and trismus, and every few minutes slight general convulsions. The finger was freely incised upon both its palmar and dorsal aspect, and the whole hand enveloped in a poultice. A hypodermic injection of morphia had been administered before I saw him, and chloral was ordered in 20 gr. doses every two

hours. Stimulants and milk were also given. No improvement taking place under this treatment, chloroform inhalation was resorted to in addition, but without benefit, the spasms continuing even whilst he was thoroughly anesthetized. He died on July 10th, about twenty-five hours after symptoms of lockjaw first appeared, his death being probably due to asphyxia from spasm of the laryngeal muscles.

I have a list of more than thirty cases of tetanus following slight injuries to the hands during the month of July, in Baltimore, with twenty-two deaths. In fourteen cases the injury was to the left hand. Four or five cases are reported of injury to the right hand, and in the others it is not stated which hand was wounded. What is the etiology of the tetanus caused by this deadly toy? Of this there is much conjecture but very little knowledge. Some physicians think it is due to the retention of the wad in the wound; others that the fulminating powder is the active agent in its production. I am inclined to attribute it to the latter cause. The temperature during July was very variable, the maximum being 96° , the minimum 65° ; there were also great variations in the force and direction of the wind, and in the humidity of the atmosphere; rain fell upon ten days, but the total amount was deficient. Many of these cases of tetanus died in twenty-four to thirty-six hours from the onset; some lived several days and then died, whilst in one case the patient survived ten days.

CASE 3.—Wound of Leg from Duck gun—Necrosis of Tibia, Fibula and Astragalus—Amputation.—S. M., aged 37, native of Cobb's Island, Va., a professional sportsman and guide, was admitted to the hospital on July 21st. Eight months ago he received an extensive wound of the leg just above and behind the ankle joint, from the discharge of a duck gun loaded with No. 4 shot. The lead entered the leg upon the inner side between the tendo achillis and the tibia,

but did not pass through the leg. Upon admission there was a wound about 3 inches long from which an offensive pus exuded. The posterior aspect of the tibia was found to be necrosed; the ankle joint being also involved. The foot was in a state of extreme talipes equinus. On July 25th, section of the tendo achillis was performed and the foot was brought to a right angle with the leg, without difficulty, and retained there with a foot splint. It was now determined to attempt to save the limb, and in order to secure free drainage a counter opening was made on the outer side of the leg, and oakum passed from one side to the other. Good hopes were entertained of saving the limb, with the foot in the normal position, but with the certainty of an ankylosed ankle joint. On July 31st, a large abscess formed upon the anterior aspect of the foot, and upon opening it and introducing a probe it was found to touch carious bone. The patient was now importunate for an amputation, and in deference to his wishes, as well as in consideration of the great doubt as to the ultimate success of the conservative effort, I decided to sacrifice the limb. The amputation was performed on August 1st in the middle third of the leg, lateral skin flaps being employed. Thorough drainage was instituted, and to-day his condition is extremely favorable.*

CASE 4.—Pistol Wound of Leg—Ball left in the Tissues.—This boy, 16 years of age, was shot by a companion about a week ago. The ball entered the right leg upon its outer side a few inches above the knee, the pistol having been about a foot from the leg when it was discharged. The ball probably passed across the leg, but as the wound is too small to admit the finger, and a probe only enters an inch its exact location cannot be determined. He suffers but little pain and inconvenience from the injury, though there is considerable swelling about the joint. What will be the result of leaving the ball in the tissues? As it is small and smooth it will most likely become encyst-

*NOTE.—August 16, the man left hospital this afternoon, 2 weeks and 1 day since the operation was performed. The flaps united almost entirely by the first intention.

ed and cause no further trouble; but if an abscess should form it would indicate the situation of the bullet, and an attempt to remove it could be undertaken with much probability of success. In the man whose leg was amputated, a large number of large shot were found quietly encysted in the tissues and causing no inconvenience whatever. I will therefore not attempt to extract the ball in this case, but will encourage the healing of the wound.

SOCIETY REPORTS.

INTERNATIONAL MEDICAL CONGRESS, 1881.

OPENING ADDRESS,

BY THE PRESIDENT, SIR JAMES PAGET, BART.

It is not necessary to defend the meeting of an International Congress. Such meetings have become one of the general customs of our time, and have thus given evidence that they are generally approved. Let me rather suggest to you some thoughts as to the work which, being in Congress, we have to do, and the spirit in which it may best be done, so that the good effects of our meeting may last long after our parting.

In the largest view of our design, it may seem to be that of bringing together a multitude of various minds for the promotion and diffusion of knowledge in the whole science and art of medicine, in their widest range, in all their narrowest divisions, in all their manifold utilities. And this design, I cannot doubt, will be fulfilled; for, although the programme tells of selected subjects for discussion, and defines the order of our work, yet knowledge will be promoted in a much wider range in the meetings without order, which will be held every day and everywhere—meetings of men with all kinds of mental power and all forms of knowledge and of skill; every one ready alike to impart and to acquire knowledge.

It is safe to say that in the casual conversations of this coming week there will be a larger interchange and diffusion of information than in any equal time and space in the whole past history of medicine. And with this interchange will be a larger increase, for in the mart

of knowledge he that receives gains, and he that gives retains, and none suffer loss.

The increase will be greater because of the great variety of minds which will meet. As I look round this hall, my admiration is moved not only by the number and total power of the minds which are here, but by their diversity; a diversity in which I believe they fairly represent the whole of those who are engaged in the cultivation of our science. For here are minds representing the distinctive characters of all the most gifted and most educated nations; characters still distinctly national, in spite of the constantly increasing intercourse of the nations. And from many of these nations we have both elder and younger men; thoughtful men and practical; men of fact and men of imagination; some confident, some skeptic; various, also, in education, in purpose and mode of study, in disposition and in power. And scarcely less various are the places and all the circumstances in which those who are here have collected and have been using their knowledge. For I think that our calling is preëminent in its range of opportunities for scientific study. It is not only that the pure science of human life may match with the largest of the natural sciences in the complexity of its subject-matter; not only that the living human body is, in both its material and its indwelling forces, the most complex thing yet known; but that in our practical duties this most complex thing is presented to us in an almost infinite multiformity. For in practice we are occupied, not with a type and pattern of the human nature, but with all its varieties in all classes of men, of every age and every occupation, in all climates and all social states; we have to study men singly and in multitudes, in poverty and in wealth, in wise and unwise living, in health and all the varieties of disease; and we have to learn, or at least to try to learn, the results of all these conditions of life while, in successive generations and in the mingling of families, they are heaped together, confused, and always changing. In every one of all these conditions man, in mind and body, must be studied by us; and every one of them offers some different problems for inquiry and solution. Wherever

our duty or our scientific curiosity or, in happy combination, both, may lead us, there are the materials and there the opportunities for separate original research.

Now, from these various opportunities of study, men are here in Congress. Surely, whatever a multitude and diversity of minds can, in a few days, do for the promotion of knowledge, may be done here. Every one has something he may teach, much more that he may learn; and, in the midst of an apparent utter confusion, knowledge will increase and multiply. It has been said, indeed, that truth is more likely to emerge from error than from confusion and, in some instances, this is true; but much of what we call confusion is only the order of nature not yet discerned; and so it may be here. Certainly, it is from what seems like the confusion of successive meetings such as this that that kind of truth emerges which is among the best moving and directing forces in the scientific as well as the social life—the truth which is told in the steady growth of general opinion.

But it is not proposed to leave the work of the Congress to what would seem like chances and disorder, good as the result might be; nor yet to the personal influences by which we may all be made fitter for work, though these may be very potent. In the stir and controversy of meetings such as we shall have, there cannot fail to be useful emulation; by the examples that will appear of success in research, many will be moved to more enthusiasm, many to more keen study of the truth; our range of work will be made wider, and we shall gain that greater interest in each other's views and that clearer apprehension of them, which are always attained by personal acquaintance and by memories of association in pleasure as well as in work. But as it will not be left to chance, so neither will sentiment have to fulfill the chief duties of the Congress.

Following the good example of our predecessors, certain subjects have been selected which will be chiefly, though not exclusively, discussed, and the discussions are to be in the sections into which we shall soon divide.

Of these subjects it would not be for me to speak, even if I were competent

to do so; unless I may say that they are so numerous and complete that—together with the opening addresses of the Presidents of Sections—they leave me nothing but such generalities as may seem commonplace. They have been selected, after the custom of former meetings, from the most stirring and practical questions of the day; they are those which most occupy men's minds, and on which there is at this time most reason to expect progress, or even a just decision, from very wide discussion. They will be discussed by those most learned in them, and in many instances by those who have spent months or years in studying them, and who now offer their work for criticism and judgment.

I will only observe that the subjects selected in every section involve questions in the solution of which all the varieties of mind and knowledge, of which I have spoken, may find their use. For there are questions, not only on many subjects, but in all stages of progress towards settlement. In some the chief need seems to be the collection of facts well observed by many persons. I say by many, not only because many facts are wanted, but because in all difficult research it is well that each apparent fact should be observed by many; for things are not what they appear to each one mind. In that which each man believes that he observes, there is something of himself; and for certainty, even on matters of fact, we often need the agreement of many minds, that the personal element of each may be counteracted. And much more is this necessary in the consideration of the many questions which are to be decided by discussing the several values of admitted facts and of probabilities, and of the conclusions drawn from them. For, on questions such as these, minds of all kinds may be well employed. Here there will be occasion even for those which are not unconditionally praiseworthy, such as those that habitually doubt, and those to whom the invention of arguments is more pleasing than the mere search for truth. Nay, we may be able to observe the utility even of error. We may not, indeed, wish for a prevalence of errors; they are not more desirable than are the crime

and misery which evoke charity. And yet in a Congress we may palliate them, for we may see how, as we may often read in history, errors, like doubts and contrary pleadings, serve to bring out the truth, to make it express itself in clearest terms and show its whole strength and value. Adversity is an excellent school for truth as well as for virtue.

But that which I would chiefly note, in relation to the great variety of minds which are here, is that it is characteristic of that mental pliancy and readiness for variation which is essential to all scientific progress, and which a great International Congress may illustrate and promote. In all the subjects for discussion we look for the attainment of some novelty and change in knowledge or belief; and after every such change there must ensue a change in some of the conditions of thinking and of working. Now for all these changes minds need to be pliant and quick to adjust themselves. For all progressive science there must be minds that are young whatever may be their age.

Just as the discovery of auscultation brought to us the necessity for a refined cultivation of the sense of hearing, which was before of only the same use in medicine as in the common business of life; or, as the employment of the numerical method in estimating the value of facts required that minds should be able to record and think in ways previously unused; or, as the acceptance of the doctrine of evolution has changed the course of thinking in whole departments of science, so is it, in less measure, in every less advance of knowledge. All such advances change the circumstances of the mental life, and minds that cannot or will not adjust themselves become less useful, or must, at least, modify their manner of utility. They may continue to be the best defenders of what is true; they may strengthen and expand the truth, and may apply it in practice with all the advantages of experience; they may thus secure the possessions of science and use them well, but they will not increase them.

It is with minds as with living bodies. One of their chief powers is in their self-adjustment to the varying conditions in which they have to live. Generally

those species are the strongest and most abiding that can thrive in the widest range of climate and of food. And of all the races of men they are the mightiest and most noble who are, or by self-adjustment can become, most fit for all the new conditions of existence in which by various changes they may be placed. These are they who prosper in great changes of their social state; who, in successive generations, grow stronger by the production of a population so various that some are fitted to each of all the conditions of material and mode of life which they can discover or invent. These are most prosperous in the highest civilization; these whom nature adapts to the products of their own arts.

Or, among other groups, the mightiest are those who are strong alike on land and sea; who can explore and colonize, and in every climate can replenish the earth and subdue it; and this not by tenacity or mere robustness, but rather by pliancy and the production of varieties fit to abide and increase in all the various conditions of the world around.

Now, it is by no distant analogy that we trace the likeness between these in their successful contests with the material conditions of life and those who are to succeed in the intellectual strife with the difficulties of science and of art. There must be minds which in variety may match with all the varieties of the subject-matters and minds which, at once or in swift succession, can be adjusted to all the increasing and changing modes of thought and work.

Such are the minds we need; or, rather, such are the minds we have; and these in great meetings prove and augment their worth. Happily the natural increase in the variety of minds in all cultivated races is—whether as cause or as consequence—nearly proportionate to the increasing variety of knowledge. And it has become proverbial, and is nearly true in science and art, as it is in commerce and in national life, that, whatever work is to be done, men are found or soon produced who are exactly fit to do it.

But it need not be denied that, in the possession of this first and chiefest power for the increase of knowledge, there is a source of weakness. In works done by

dissimilar and independent minds, dispersed in different fields of study, or only gathered into self-assorted groups, there is apt to be discord and great waste of power. There is, therefore, need that the workers should from time to time be brought to some consent and unity of purpose; that they should have opportunity for conference and mutual criticism, for mutual help and the tests of free discussion. This it is which, on the largest scale and most effectually, our Congress may achieve; not, indeed, by striving after a useless and happily impossible uniformity of mind or method, but by diminishing the lesser evil of waste and discord which is attached to the far greater good of diversity and independence. Now, as in numbers and variety the Congress may represent the whole multitude of workers everywhere dispersed, so in its gathering and concord it may represent a common consent that, though we may be far apart and different yet our work is and shall be essentially one; in all its parts mutually dependent, mutually helpful, in no part complete or self-sufficient. We may thus declare that as we who are many are to be members of one body, so our work for science shall be one though manifold; that as we, who are of many nations, will, for a time, forget our nationalities, and will even repress our patriotism, unless for the promotion of a friendly rivalry, so will we in our work, whether here and now or everywhere and always, have one end and one design—the promotion of the whole science and whole art of healing.

It may seem to be a denial of this declaration of unity that after this general meeting we shall separate into sections more numerous than in any former Congress. Let me speak of these sections to defend them; for some maintain that even in such a division of studies as these may encourage, there is a mischievous dispersion of forces. The science of medicine, which used to be praised as one and indivisible, is broken up, they say, among specialists, who work in conflict rather than in concert, and with mutual distrust more than mutual help.

But let it be observed that the sections which we have instituted are only some

of those which are already recognized in many countries, in separate societies, each of which has its own place and rules of self-government and its own literature. And the division has taken place naturally in the course of events which could not be hindered. For the partial separation of medicine, first from the other natural sciences, and now into sections of its own, has been due to the increase of knowledge being far greater than the increase of individual mental power.

I do not doubt that the average mental power constantly increases in the successive generations of all well-trained peoples, but it does not increase so fast as knowledge does, and thus, in every science, as well as in our own, a small portion of the whole sum of knowledge has become as much as even a large mind can hold and duly cultivate. Many of us must, for practical life, have a fair acquaintance with many parts of our science, but none can hold it all; and for complete knowledge, or for research, or for safely thinking out beyond what is known, no one can hope for success unless by limiting himself within the few divisions of the science for which, by nature or by education, he is best fitted. Thus our division into sections is only an instance of that division of labor which, in every prosperous nation, we see in every field of active life, and which is always justified by more work better done.

Moreover, it cannot be said that in any of our sections there is not enough for a full strong mind to do. If any one will doubt this, let him try his own strength in the discussions of several of them.

In truth, the fault of specialism is not in narrowness, but in the shallowness and the belief in self-sufficiency with which it is apt to be associated. If the field of any specialty in science be narrow, it can be dug deeply. In science, as in mining, a very narrow shaft, if only it be carried deep enough, may reach the richest stores of wealth and find use for all the appliances of scientific art. Not in medicine alone, but in every department of knowledge, some of the grandest results of research and of learning, broad and deep, are to be found in monographs on

subjects that, to the common mind, seemed small and trivial.

And study in a Congress such as this may be a useful remedy for self-sufficiency. Here every group may find a rare occasion, not only for an opportune assertion of the supreme excellence of its own range and mode of study, but for the observation of the work of every other. Each section may show that its own facts must be deemed sure, and that by them every suggestion from without must be tested; but each may learn to doubt every inference of its own which is not consistent with the facts or reasonable beliefs of others; each may observe how much there is in the knowledge of others which should be mingled with its own; and the sum of all may be the wholesome conviction of all that we cannot justly estimate the value of a doctrine in one part of our science till it has been tried in many or in all.

We were taught this in our schools; and many of us have taught that all the parts of medical science are necessary to the education of the complete practitioner. In the independence of later life, some of us seem too ready to believe that the parts we severally choose may be self-sufficient, and that what others are learning cannot much concern us. A fair study of the whole work of the Congress may convince of the fallacy of this belief. We may see that the test of truth in every part must be in the patient and impartial trial of its adjustment with what is true in every other. All perfect organizations bear this test; all parts of the whole body of scientific truth should be tried by it.

Moreover, I would not, from a scientific point of view, admit any estimate of the comparative importance of the several divisions of our science, however widely they may differ in their present utilities. And this I would think right, not only because my office as president binds me to a strict impartiality and to the claim of freedom of research for all, but because we are very imperfect judges of the whole value of any knowledge, or even of single facts. For every fact in science, wherever gathered, has not only a present value, which we may be able to estimate, but a living and germinal power of which none can guess the issue.

It would be difficult to think of anything that seemed less likely to acquire practical utility than those researches of the few naturalists who, from Leeuwenhoeck to Ehrenberg, studied the most minute of living things, the *Vibrionidæ*. Men boasting themselves as practical might ask, "What good can come of it?" Time and industry have answered, "This good: those researches have given a more true form to one of the most important practical doctrines of organic chemistry; they have introduced a great beneficial change in the most practical part of surgery; they are leading to one as great in the practice of medicine; they concern the highest interests of agriculture, and their power is not yet exhausted."

And as practical men were, in this instance, incompetent judges of the value of scientific facts, so were men of science at fault when they missed the discovery of anæsthetics. Year after year the influences of laughing gas and of ether were shown: the one fell to the level of the wonders displayed by itinerant lecturers, students made fun with the other; they were the merest practical men, men looking for nothing but what might be straightway useful, who made the great discovery which has borne fruit not only in the mitigation of suffering, but in a wide range of physiological science.

The history of science has many similar facts, and they may teach that any man will be both wise and dutiful if he will patiently and thoughtfully do the best he can in the field of work in which, whether by choice or chance, his lot is cast. There let him, at least, search for truth, reflect on it, and record it accurately; let him imitate that accuracy and completeness of which I think we may boast that we have, in the descriptions of the human body, the highest instance yet attained in any branch of knowledge. Truth so recorded cannot remain barren.

In thus speaking of the value of careful observation and records of facts, I seem to be in agreement with the officers of all the sections; for, without any intended consent, they have all proposed such subjects for discussion as can be decided only by well-collected facts and fair direct inductions from them. There are no questions on theories or mere doc-

trine. This, I am sure, may be ascribed, not to any disregard of the value of good reasoning or of reasonable hypotheses, but partly to the just belief that such things are ill suited for discussion in large meetings, and partly to the fact that we have no great opponent schools, no great parties named after leaders or leading doctrines about which we are in the habit of disputing. In every section the discussions are to be on definite questions, which, even if they be associated with theory or general doctrines, may yet be soon brought to the test of fact; there is to be no use of doctrinal touchstones.

I am speaking of no science but our own. I do not doubt that in others there is advantage in dogma, or in the guidance of a central organizing power, or in divisions and conflicting parties. But in the medical sciences I believe that the existence of parties founded on dominant theories has always been injurious; a sign of satisfaction with plausible errors, or with knowledge which was even for the time imperfect. Such parties used to exist, and the personal histories of their leaders are some of the most attractive parts of the history of medicine; but, although in some instances an enthusiasm for the master-mind may have stirred a few men to unusual industry, yet very soon the disciples seem to have been fascinated by the distinctive doctrine, content to bear its name, and to cease from active scientific work. The dominance of doctrine has promoted the habit of inference, and repressed that of careful observation and induction. It has encouraged that fallacy to which we are all too prone, that we have at length reached an elevated sure position on which we may rest, and only think and guide. In this way specialism in doctrine or in method of study has hindered the progress of science more than the specialism which has attached itself to the study of one organ or of one method of practice. This kind of specialism may enslave inferior minds: the specialism of doctrine can enchant into mere dreaming those that should be strong and alert in the work of free research.

I speak the more earnestly of this because it may be said, if our Congress be representative, as it surely is, may we

not legislate? May we not declare some general doctrines which may be used as tests and as guides for future study? We had better not.

The best work of our International Congress is in the clearing and strengthening of the knowledge of realities; in bringing, year after year, all its force of numbers and varieties of minds to press forward the demonstration and diffusion of truth as nearly to completion as may from year to year be possible. Thus, chiefly, our Congress may maintain and invigorate the life of our science. And the progress of science must be as that of life. It sounds well to speak of the temple of science and of building and crowning the edifice. But the body of science is not as any dead thing of human work, however beautiful; it is as something living, capable of development and a better growth in every part. For as in all life the attainment of the highest condition is only possible through the timely passing-by of the less good, that it may be replaced by the better, so it is in science. As time passes, that which seemed true and was very good becomes relatively imperfect truth, and the truth more nearly perfect takes its place.

We may read the history of the progress of truth in science as a palæontology. Many things which, as we look far back, appear, like errors, monstrous and uncouth creatures, were, in their time, good and useful, as good as possible. They were the lower and less perfect forms of truth which, amid the floods and stifling atmospheres of error, still survived; and just as each successive condition of the organic world was necessary to the evolution of the next following higher state, so from these were slowly evolved the better forms of truth which we now hold.

This thought of the likeness between the progress of scientific truth and the history of organic life may give us all the better courage in a work which we cannot hope to complete, and in which we see continual and sometimes disheartening change. It is, at least, full of comfort to those of us who are growing old. We that can read in memory the history of half a century might look back with shame and deep regret at the imperfections of our early knowledge if we might not be sure that we held, and sometimes

helped onward, the best things that were in their time possible, and that they were necessary steps to the better present, even as the present is to the still better future. Yes, to the far better future; for there is no course of nature more certain than is the upward progress of science. We may seem to move in circles, but they are the circles of a constantly ascending spiral; we may seem to sway from side to side, but it is only as on a steep ascent which must be climbed in zigzag.

What may be the knowledge of the future none can guess. If we could conceive a limit to the total sum of mental power which will be possessed by future multitudes of well-instructed men, yet could we not conceive a limit to the discovery of the properties of materials which they will bend to their service. We may find the limit of the power of our unaided limbs and senses; but we cannot guess at a limit to the means by which they may be assisted, or to the invention of instruments which will become only a little more separate from our mental selves than are the outer sense-organs with which we are constructed.

In the certainty of this progress the great question for us is, What shall we contribute to it? It will not be easy to match the recent past. The advance of medical knowledge within one's memory is amazing whether reckoned in the wonders of the science not yet applied, or in practical results in the general lengthening of life, or, which is still better, in the prevention and decrease of pain and misery, and in the increase of working power. I cannot count or recount all that in this time has been done; and I suppose there are very few, if any, who can justly tell whether the progress of medicine has been equal to that of any other great branch of knowledge during the same time. I believe it has been; I know that the same rate of progress cannot be maintained without the constant and wise work of thousands of good intellects; and the mere maintenance of the same rate is not enough, for the rate of the progress of science should constantly increase. That in the last fifty years was at least twice as great as that in the previous fifty. What will it be in the next, or, for a more useful question, What shall we contribute to it?

I have no right to prescribe for more than this week. In this let us do heartily the proper work of the Congress, teaching, learning, discussing, looking for new lines for research, planning for mutual help, forming new friendships. It will be hard work if we will do it well; but we have not met for mere amusement or for recreation, though for that I hope you will find provision, and enjoy it the better for the work preceding it.

And when we part let us bear away with us, not only much more knowledge than we came with, but some of the lessons for our conduct in the future which we may learn in reflecting the work of our Congress.

In the number and intensity of the questions brought before us we may see something of our responsibility. If we could gather into thought the amounts of misery or happiness, or of power for work, which may depend on the answers to all the questions that will come before us, this might be a measure of our responsibility. But we cannot count it; let us imagine it; we cannot even in imagination exaggerate it. Let us bear it always in our mind, and remind ourselves that our responsibility will constantly increase. For, as men become in the best sense better educated, and the influence of scientific knowledge on their moral and social state increases, so among all sciences there is none of which the influence and, therefore, the responsibility will increase more than ours, because none more intimately concerns man's happiness and working power.

But, more clearly in the recollections of the Congress, we may be reminded that in our science there may be, or, rather, there really is, a complete community of interest among men of all nations. On all the questions before us we can differ, discuss, dispute, and stand in earnest rivalry; but all consistently with friendship, all with readiness to wait patiently till more knowledge shall decide which is in the right. Let us resolutely hold to this when we are apart; let our internationality be a clear abiding sentiment, to be, as now, declared and celebrated at appointed times, but never to be forgotten; we may, perhaps, help to gain a new honor for science, if we thus suggest that in many more things, if they

were as deeply and dispassionately studied, there might be found the same complete identity of international interest as in ours.

And then, let us always remind ourselves of the nobility of our calling. I dare to claim for it that among all the sciences ours, in the pursuit and use of truth, offers the most complete and constant union of those three qualities which have the greatest charm for pure and active minds—novelty, utility and charity. These three, which are sometimes in so lamentable disunion, as in the attractions of novelty without either utility or charity, are in our researches so combined that, unless by force or willful wrong, they hardly can be put asunder. And each of them is admirable in its kind. For in every search for truth we cannot only exercise curiosity, and have the delight—the really elemental happiness—of watching the unveiling of a mystery, but, on the way to truth, if we look well round us, we shall see that we are passing among wonders more than the eye or mind can fully apprehend. And as one of the perfections of nature is that in all her works wonder is harmonized with utility, so is it with our science. In every truth attained there is utility either at hand or among the certainties of the future. And this utility is not selfish; it is not in any degree correlative with money-making; it may generally be estimated in the welfare of others better than in our own. Some of us may, indeed, make money and grow rich; but many of those that minister even to the follies and vices of mankind can make much more money than we. In all things costly and vainglorious they would far surpass us if we would compete with them. We had better not compete where wealth is the highest evidence of success; we can compete with the world in the nobler ambition of being counted among the learned and the good who strive to make the future better and happier than the past. And to this we shall attain if we will remind ourselves that as in every pursuit of knowledge there is the charm of novelty, and in every attainment of truth utility, so in every use of it there may be charity. I do not mean the charity which is in hospitals or in the service of the poor, great as is the privi-

lege of our calling in that we may be its chief ministers, but that wider charity which is practiced in a constant sympathy and gentleness, in patience and self-devotion. And it is surely fair to hold that, as in every search for knowledge we may strengthen our intellectual power, so in every practical employment of it we may, if we will, improve our moral nature; we may obey the whole law of Christian love, we may illustrate the highest induction of scientific philanthropy.

Let us, then, resolve to devote ourselves to the promotion of the whole science, art, and charity of medicine. Let this resolve be to us a vow of brotherhood; and may God help us in our work.

EDITORIAL.

MEDICAL EDUCATION IN BALTIMORE.
—The two medical schools of this city, the school of medicine of the University of Maryland, and the College of Physicians and Surgeons, both begin their sessions during the present month, and it is probable that ere our next issue makes its appearance, they will have entered upon their winter's work. In view of the general prosperity of the country at large, there is every reason to anticipate for them a highly successful season, and the cheering outlook is already visibly reflected in the happy countenances of the respective Deans.

Baltimore unquestionably possesses very great natural advantages as a seat for medical teaching. Its central position makes it more convenient and accessible than any of the large American centres of population, and at the same time frees it from the spirit of sectionalism that is always to be found in the extremes of territory. All may feel welcome in this cosmopolitan city; none need fear social, religious, political, or intellectual ostracism. As for living, it is nowhere in any place of equal size so cheap.

The conspicuous need, educationally and intellectually, of Baltimore, in the past, has always been *a great academic university*. Nothing has done more to retard the growth and prosperity of our medical schools, and indeed to repress all intellectual development in this com-

munity, than the want of such an institution in our midst. Happily this want has been most bountifully supplied by the founding of the Johns Hopkins University with a very liberal provision in the way of endowment. The advantages to be realized to our community from this foundation are already becoming manifest, and as time wears on we will doubtless see developed here intellectual influences and activities similar to those which have made Boston and Edinburgh, Paris and Vienna, the great centres of thought and dictators of opinion that they are.

Already we may say, and we challenge denial, that *the advantages and facilities for elementary medical study and observation in Baltimore are quite equal to those to be obtained anywhere else in America, without any exception whatever.*

MISCELLANY.

OPENING OF THE MEDICAL SCHOOLS.

—The 75th annual session of the School of Medicine of the University of Maryland will commence September 15th; the introductory course September 8th.

The regular session of the College of Physicians and Surgeons will commence October 1st, the introductory course September 15th.

DR. JOSEPH C. HUGHES, Professor of Surgery in the College of Physicians and Surgeons, at Keokuk, Iowa, died August 10th, aged 60. He was a native of Pennsylvania, and a graduate of the University of Maryland, of the class of 1845. He was one of the most prominent surgeons of the Northwest.

SYMPTOMS are only the expression of a hidden force; it is our business to follow up this hidden force to its seat in the human system, and there learn its nature and causes. The first question of the pathologist, as of the biologist, is, Where? Consequently, whether they probe the seat of disease with the anatomical knife, or whether they merely confine themselves to observation, the mode of proceeding is essentially anatomical. It is the recognition of this principle which, in a few decades, has changed the whole face of science.—*Virchow, Int. Med. Cong.*

THE following resolution was adopted in the Congress: "That this Congress records its conviction that experiments upon living animals have proved of the utmost service to medicine, and are indispensable for its further progress; that, accordingly, while strongly deprecating the infliction of unnecessary pain, it is of opinion that alike in the interest of man and of animals, it is not desirable to restrict competent persons in the performance of such experiments."

MEDICAL EDUCATION.—The evidence of discontent and tendency to change is a good sign. In these matters stillness means sleep or death; and the fact that the stream is continually changing its bed shows that its course lies through fertile alluvium, and not through sterile lava or granite.—*Billings.*

THERE can be little doubt that a large number of maladies in England, as gout, Bright's disease, etc., are induced by mere excesses or inequalities in a mode of life which is considered ordinarily correct.—*Wilks, Int. Med. Cong.*

MEDICAL ITEMS.

FOUR rules for the preparation of an article for a journal: 1. Have something to say. 2. Say it. 3. Stop as soon as you have said it. 4. Give the paper a proper title.—*Billings.*—The Maryland Woman's Hospital will be reopened for admission of patients September 1st.—The 7th An. Meeting of the Indiana, Illinois and Kentucky Tri-State Med. Society, will be held in St. Louis, Oct. 25, 26 and 27, 1881.—The Obstetrical and Gynecological Section, Med. and Chir. Fac. of Md., will meet Friday, Sept. 23rd, 8.15 P. M.—Dr. J. W. Chambers, of this city, has stretched the sciatic for locomotor ataxia with marked relief to the symptoms.—*The Am. Journ. of Obstetrics* will issue a monthly supplement after Jan. 1st, but without extra charge.—*Erratum.*—In the article on "Optic Neuritis," by Dr. Friedenwald, in our last issue, page 173, left-hand column, five lines from bottom, *peritonitis* should have been *perineuritis*.—A medal was struck in commemoration of the International Congress.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

CHRONIC PELVIC ABSCESS.

A CONTRIBUTION TO THE DIFFERENTIAL DIAGNOSIS OF ABDOMINAL TUMORS.

BY A. F. ERICH, M. D.,

Professor of Diseases of Women, College of Physicians and Surgeons, Baltimore; Surgeon in charge of the Maryland Woman's Hospital, etc.

(Read at the Clinical Society of Maryland).

There is probably no branch of practical surgery which presents to the practitioner so many difficulties as the differential diagnosis of tumors in the abdominal and pelvic cavities. Although the literature of gynecological surgery can show a considerable number of individual cases bearing upon this subject, no definite rules can as yet be laid down for our guidance. In fact, in most of the cases reported mistakes had been made in the diagnosis, and they were made public by the writers with the object of warning others against similar errors. With a like view I desire to report the following cases, trusting that the importance of the subject, and the unsatisfactory manner in which it is treated by systematic writers, may be sufficient excuse for occupying your time with the

details. I am convinced that a recollection of the *errors* made by ourselves or others will be of more value, when at any time we shall be confronted with a difficult case, than the remembrance of a dozen successes. Of course to appreciate the relative value of different factors in the problem, and to arrive at its correct solution, other qualities than mere memory are needed; or, as Matthews Duncan puts it: "For a good diagnosis there are wanted common sense, a knowledge of and experience in disease, and a watchfulness against already known sources of error." Assuming the possession of the first two of these elements of success on your part I shall endeavor to increase the "known sources of error" by the following cases:

CASE I.—April 20, 1876. Mrs. R. C.; white; American; aged 43 years. Menstruation began at 15 years, and has always remained regular. She was married in her 16th year, and had three children, the last one 16 years ago. She was a large, well-nourished woman, who had always led an active life up to the time of beginning of the illness for which she sought advice.

During a period of nearly four years she had complained of severe paroxysmal pains in the left pelvic region, lasting one or two days. These attacks were

frequently accompanied by nausea and vomiting. A vaginal examination made a year and ten months previous to the above date, revealed an irregular, hard nodular tumor in the left iliac region and somewhat posteriorly. There was no fever. In view of the symptoms and the results of the physical examination, a probable diagnosis of cancer was ventured. Dr. Alan P. Smith, who saw the case in consultation, also agreed as to the probability of the tumor being cancerous. As in consequence of this diagnosis there was no hope of complete relief, palliative treatment alone was ordered. A year and a half after the patient first came under treatment, and three and a half years after her illness, she was again examined in company with Dr. James R. Chadwick, of Boston, who was then in the city. The conditions noted at this examination were entirely different from those observed eighteen months before. The tumor, which formerly occupied the left postero-lateral region of the pelvis had entirely disappeared, and a firm, round, movable tumor, about the size of an adult head, was found occupying the hypogastric region. The most prominent portion of the tumor was in the middle line and reached somewhat above the umbilicus. The tumor was regarded by Dr. Chadwick as a fibroid, and the change of position explained by supposing the fibroid when small to have been embedded in inflammatory exudation, on the absorption of which it became movable and changed its position as already indicated. During the interval since her former treatment the patient's health had very much improved, and she had gained in flesh and color. She still suffered from paroxysms of severe pain at intervals, and as the tumor, from its size, gave her considerable discomfort by pressure on surrounding organs, she begged that an operation might be performed to give her relief. With the advice and concurrence of Dr. Chadwick, the removal of the supposed fibroid by laparotomy was decided upon. The operation was done some two months later in the presence of a number of physicians of this city. Upon making an incision in the median line, the tumor was readily brought into view. There were no peri-

tonitic adhesions. After the tumor was exposed, slight fluctuation could be made out. An explorative puncture was made with a hypodermic syringe, which yielded pure pus. A trocar was then introduced and a large quantity of pure pus drawn off. The cyst walls were thick and fibrous, and were adherent to the left side and floor of the pelvis and left side of the uterus. An India-rubber drainage tube was passed from the abdominal wound through the abdominal cavity, cyst and Douglas's cul-de-sac, into the vagina. The wound was then closed, retaining one end of the drainage tube at its lower border. A constant stream of carbolic water was allowed to flow through the drainage tube slowly from a reservoir placed alongside of the bed and slightly above the level of the body. The patient died on the fifth day, of septicæmia.

On *post-mortem* examination it was found that the enlargement consisted of an abscess, which had evidently commenced in the left iliac region, extending between the folds of the left broad ligament and so forming a large cyst. The uterus was pushed forwards against the symphysis pubis and slightly to the right side. The cyst-walls consisted of peritoneum, condensed connective tissue and inflammatory exudation. The walls were not of uniform thickness, but appeared thinned in spots as if some of the layers of the cyst-wall had yielded at these points to the distending pressure from within.

The drainage tube failed in its intended functions entirely. It soon became surrounded by inflammatory exudation and adhesions between the intestines and peritoneum. The tube was thus completely isolated and the antiseptic fluid prevented from escaping into the peritoneal cavity. The flowing out of septic fluids from the abdominal cavity through the drainage tube was likewise prevented by these conditions.

This case teaches that fluctuation cannot always be made out, even when a large amount of fluid is present. It may be masked by the distention, the thickness of the cyst-wall, or an excessive deposit of fat in the abdominal walls. In considering the case in all its bearings I was compelled to acknowledge an

error of omission in not making an exploratory puncture before resorting to laparotomy. I have since then determined never to pronounce an abdominal tumor solid until after aspiration.

CASE 2.—May 5, 1877. E. B., single; aged 25; white; American; seamstress. Menstruation commenced at the age of 17 and was regular and painless up to sixteen months ago. Since then it had become irregular and painful. Has had considerable leucorrhœa. Appetite and digestion are good. No pain on locomotion, micturition or defecation. The case was seen in consultation with the late Prof. T. R. Brown, who had diagnosed a solid uterine fibroid. The uterus could not be isolated from the tumor which extended nearly to the umbilicus and conveyed the impression of a large interstitial fibroid. There were some of the constitutional symptoms indicating suppuration, but no fluctuation could be detected in any part of the growth. The patient was unmarried, had never been pregnant, and had undergone no operation upon the uterus. There was consequently no reason to suspect pelvic cellulitis or abscess. In accordance, however, with the determination before expressed, never to pronounce positively on the nature of any abdominal tumor without an exploratory puncture, an aspirator needle was introduced, and to the surprise of Dr. Brown and myself, upwards of a pint of pure pus was withdrawn. The patient then passed out of my hands, but opportunity was given a year later for another examination which showed that the tumor was no longer round and hard. It had become soft, much larger, and fluctuation was very distinct. There was evidently a cavity containing fluid distinct from the abdominal cavity. I have since been informed that the patient had entirely recovered.

CASE 3.—March 4, 1880. Mrs. E., aged 33 years; married; born in Germany and leading an active life. Menstruation began in her eighteenth year, recurring every three weeks and generally profuse in quantity. Digestion moderately good and action of bowels regular. Has been married since her 21st year, has had five children, and no abortions. Her last pregnancy terminated four months ago. She was sent to

me by a professional friend who had made a probable diagnosis of ovarian tumor.

The patient's appearance was emaciated and anemic. Her tongue was coated and appetite somewhat impaired, but there was no fever. The lower part of the abdomen was occupied by an enlargement in the middle line which presented all the indications of a cyst. *Per vaginam* the tumor could be made out as an elastic swelling in the roof of the vagina and behind the uterus which was pushed forward. No induration could be detected by the vaginal examination, although it was carefully searched for; the rapid growth of the tumor and its appearance after parturition having raised a suspicion of pelvic abscess. The absence of fever, however, and the fact that all induration was wanting in the vaginal roof for so short a period after confinement seemed to exclude pelvic cellulitis and abscess. The diagnosis of ovarian cyst was therefore provisionally endorsed and the patient made preparations to enter the *Maryland Woman's Hospital* for operation. Preparatory to this a tonic of iron, quinine and strychnia, was ordered, together with a mercurial purge. Two weeks later she entered the hospital, but with a marked change in symptoms. The purgative had produced a decided diarrhœa, the discharge being profuse and very offensive. She was now also markedly hectic, the fever being high and regular in its evening exacerbations. The tumor was reduced to one-half its former size, and its upper portion was resonant under percussion. It was believed that the cyst had ruptured into the intestine and that its contents had been partly discharged and the remainder undergone suppuration and decomposition. It was decided to aspirate the tumor at once in order to remove its remaining contents which were evidently the cause of the fever. A quantity of exceedingly offensive pus and gas was drawn off, after which the symptoms somewhat improved. In a few days the cyst again filled. With the aspirator the cavity was again emptied of very fetid pus, and then washed out some twelve or fifteen times with carbolic water until all fetor had disappeared. The water was injected in

sufficient quantities to fully distend the cavity each time, in order to remove all the pus it might contain. Five days later the cavity again filled, with a recurrence of the fever and symptoms of the typhoid condition. No adhesions could be made out between the cyst and the anterior abdominal wall. It had become evident that the tumor was a pelvic abscess, and that constant drainage of the cavity was necessary in order to obtain a cure. A larger aspirator-trocar was now introduced and the canula allowed to remain after the pus had been evacuated. The cavity was distended once a day by carbolised water which flowed through the canula from a rubber tube leading to a reservoir above the bed. In the intervals constant drainage was kept up by a syphon arrangement which prevented the entrance of air into the cyst. At the end of five days the cavity was completely obliterated. No more fluid could be injected, and nothing drained away through the tube. The canula was then removed, and the puncture dressed with carbolised oil. In a short time the patient had completely recovered, and she is now again pregnant.

In order to show that I am not alone, but in very good company in making the diagnostic errors in the cases here reported, I shall give abstracts of a few cases presenting similar difficulties, which have occurred to some of the most eminent surgeons and gynecologists. In these cases abdominal tumors, which were afterwards shown to be pelvic abscesses, have been mistaken for pregnancy, fibroid tumors of the uterus and ovarian cysts. To mistake any abdominal growth for normal pregnancy, especially if the patient can be kept some time under observation, seems to me only an evidence of carelessness on the part of the observer, and I have no doubt that with an increase in our knowledge of the clinical history and relations of abdominal and pelvic new-formations, whether solid or cystic, the differentiation between them will become in time easy and certain.

D. Warren Brickell reports the following case (*Am. Journ. Med. Sci.*, April, 1877, p. 363): In September 1873, was called to see a woman and give an opinion as to the existence of

pregnancy. The history was as follows: "In the previous spring she had gotten quite wet on the street during the existence of the catamenia, and was, within a few hours, the subject of arrest of the function, accompanied with pain and fever. She treated herself several days, but growing worse called in a physician. He treated her during a month or more for malarial fever, and when she called attention to a tumor in the pelvis, he pronounced her pregnant. As soon as she was able to travel he ordered her to the Virginia Springs. At the springs she remained for a month, and although she improved in general health, the tumor grew steadily. On reaching New York she sought the advice of a midwife, who told her she was pregnant; then she called in a physician of standing, who corroborated the opinion. External examination revealed a perfectly central tumor, somewhat pear-shaped, with the larger end upwards, and fully the size of a five months pregnant womb. It was rather tender to the touch and lacked the elasticity of the pregnant womb. Auscultation revealed no heart-sounds or placental *souffle*. The touch, *per vaginam*, revealed the small unimpregnated uterus high up, and pushed over to the left. The sound, applied through the speculum, proved the depth of the organ to be normal, and in all respects it seemed to be in a healthy condition. The tumor was readily felt in every direction *per vaginam*. It could be caught readily between the external and internal hands, and there was a good deal of mobility."

Dr. Brickell states that he promptly told the patient he had no doubt the supposed pregnant womb was simply a collection of pus. As the patient was obliged to leave immediately for New Orleans, she was advised to consult the late Dr. Choppin on her arrival. After some time she sent for him to attend her in what she still believed her approaching confinement. After an examination Dr. Choppin told her that she was not pregnant but that he was inclined to suspect fibroid. Some time afterwards the tumor burst into the rectum discharging large quantities of pus; later discharge of pus also took place through the bladder.

In this case two physicians and a midwife had diagnosticated pregnancy, one suspected fibroid, and the reporter the true condition.

Emmet gives the details of a case* in which a fibroid tumor of the posterior wall of the uterus was diagnosticated by two skilled physicians of New York. Dr. Emmet found a cystocele, presenting at the labia, and due to the crowding forward of the enlarged uterus. What seemed to be a large nodulated fibroid tumor was found on its posterior wall. On elevating the cervix on the point of the fingers and tilting the fundus forward against the pubis, the tumor was made evident to several gentlemen present at the examination. The facility with which the size and relation of the tumor to the uterus could be accurately mapped out through the abdominal wall was shown by Dr. Emmet.

Three weeks after the patient entered the hospital she was operated on for the cystocele. The operation was successful, the sutured lines being perfect except about half an inch near the neck of the bladder where a few sutures had torn out. Seven weeks later the small opening left was closed by four sutures. Two days afterward the patient had an exceedingly offensive movement of the bowels. "Shortly afterwards," continues Dr. Emmett, "the expression of the patient's face indicated that some trouble was brewing, but there was no special symptom to indicate what it was. The pulse was 95 per minute, the skin and tongue in a normal condition, and the abdomen free from tenderness on pressure."

"No change took place until five o'clock the following afternoon, when suddenly she had two copious fetid evacuations per rectum. The pulse rose rapidly to 170, the tongue became dry, the body covered with a clammy sweat, and she sank into a profound collapse." She died the following evening.

The post-mortem examination proved the supposed fibrous tumor to have been a large abscess, with several smaller ones communicating with it, between the peritoneum and uterus, which had rup-

tured into the rectum. The abscesses were encysted within a common sac and free from adhesions above, except at one point, to a portion of the small intestines. The other adhesions extended along the bottom of the cul-de-sac, from the uterus to the rectum. Some thickening of the left broad ligament was found.

Dr. Emmet, in commenting on the case, says,* "I fear that I would be liable to fall into error in any similar case not presenting a previous history more to the point, and where the patient was in good health, the uterus being somewhat enlarged and menstruation more profuse than natural. The absence of fluctuation was due to the density of the cyst, while the mobility of the uterus, the mass in connection with it, and its nodulated surface added greatly to the perplexity." Dr. Emmet concluded, after an examination of the specimen, that the abscess was primary, and not the result of the breaking down of the fibroid tumor.

Rheinstädter, of Cologne, reports a case (*Archiv f. Gynaekologie*, Bd. 14, p. 501) in which an encapsulated perimetritic abscess, lasting for several years, had been mistaken for ovarian tumor by several competent gynecologists. The tumor was globular, originating in the pelvic cavity and reaching to the umbilicus. The uterus could not be isolated; the sound entered in the normal direction to the usual depth. The clinical history was that of recurrent perimetritis. Very little pain on palpation, except at one point in the left groin where the abscess pointed. Incision and drainage; spontaneous opening of abscess into the vagina. On the following day an attempt was made to connect the two openings for the purpose of through drainage, but this was found impossible. Three months subsequently, patient is entirely well; tumor entirely disappeared.

Dr. Alfred C. Post (*N. Y. Med. Gazette*, Nov. 27, 1881, p. 672) reported the following case during a discussion on obscure pelvic tumors before the New York Academy of Medicine: A woman, aged 60, was admitted to the Presbyterian Hospital with a large abdominal tumor, which, on examination, was found to be half firm, very hard and globular,

* Principles and Practice of Gynecology, 2nd edition, p. 275.

* Tb. p. 277.

while the other half fluctuated. The conclusion was arrived at that it was a fibro-cystic tumor. It was aspirated, and about seven pints of fluid containing pus were evacuated. It is very probable that this was likewise a case of pelvic abscess.

Schlesinger, quoted by Bandl (*Handbuch der Frauenkrankheiten, Red. von Billroth, V Abschn., p. 133*) relates the case of a woman aged 37, who died in one of the Vienna hospitals of cancer of the uterus. Her symptoms had begun nine months previously. The patient was emaciated and anemic. Her abdomen was distended on the right side by a tense tumor, extending from the symphysis pubis to the arch of the ribs. On palpation the tumor seemed to be composed of large lobules; it was painful and immovable and dull on percussion. The right leg was strongly flexed at the knee and painful on extension. There were also pains in the abdomen and iliac region. No further clinical data are given in the report.

At the *post mortem* examination the tumor was found to consist of a subperitoneal abscess of the size of an adult head. It seems probable, from the meagre clinical details given, that either no diagnosis of the enlargement was made, or that it was not borne out by the autopsy.

In view of these difficulties in diagnosis, which have been acknowledged by the best men in the profession as liable to occur to them, I think it advisable to use the aspirator in all cases of doubtful abdominal tumor before pronouncing definitely upon its nature. This would have prevented most of the mistakes made in the preceding cases.

In all cases of pelvic abscess, the cavity, after evacuation of the pus, should be kept constantly drained by a syphon drain, and daily washed out with an antiseptic solution. By means of the syphon drain the entrance of air is prevented from without, and hence decomposition of the pus and septicæmia cannot take place. Obliteration of the cavity is also secured more rapidly in consequence of the constant and complete evacuation of its contents.

REMARKS UPON THE USE OF DUBOISIA IN OPHTHALMIC PRACTICE; WITH REPORT OF A CASE IN WHICH ALARMING CONSTITUTIONAL SYMPTOMS FOLLOWED ITS APPLICATION TO THE EYES.

BY SAMUEL THEOBALD, M. D.

Surgeon to the Baltimore Charity Eye and Ear Dispensary; Ophthalmic and Aural Surgeon to St. Vincent's Hospital.

Since the use of the lately discovered mydriatic, duboisia, has become general in ophthalmic practice, as a substitute in certain cases for atropia (chiefly because of the more evanescent character of its action upon the pupil and ciliary muscle), a number of instances in which unpleasant constitutional effects have followed its application to the eyes, have been reported, both in this country and in Europe. In one of the first of these cases, reported by Dr. Wm. F. Norris, of Philadelphia, in the *American Journal of Medical Sciences*, April, 1879, the toxic symptoms followed the application of "a minute quantity" of the sulphate of duboisia applied in substance to one eye of a healthy girl of 18 years, but in most of them they have been produced by the instillation of a four-grain solution of the salt—this being the strength in which it was thought best to employ it. Although I have, in many instances, used a four-grain solution without the slightest evidence of constitutional disturbance, even when it has been applied thrice daily for weeks, my experience in other cases has been such as to render me cautious in employing so strong a solution, especially for the purpose of determining errors of refraction, since it is under such circumstances that the absorption of the drug seems most active,—owing, perhaps, to absence of lachrymation—and the toxic effects most apt to exhibit themselves. How widely duboisia differs from atropia in this respect,

may be inferred from the fact that even in infants two or three weeks old a four-grain solution of the latter can be applied to the eyes with safety.

In only one instance in my experience have alarming symptoms followed the use of duboisia, although several times I have seen giddiness and a "tipsy" condition, once accompanied by vomiting, produced by the cautious instillation into each eye of a single drop of a solution containing four grains to the ounce. A brief description of this case may be not without interest:

A healthy young woman, of medium height, 19 years of age, who earned a livelihood by working a sewing machine, came to my office to consult me in regard to her sight, which had been defective from childhood. A cursory examination showed the presence of mixed astigmatism, and for the purpose of accurately testing the refractive condition I determined to paralyze the accommodation. To this end I dropped into each eye, by means of a pipette, two small drops (certainly not more than 3 *m.* in all) of a solution of sulphate of duboisia, gr. iv to aq. destill. \mathfrak{z} i. This was done shortly before 10 o'clock in the morning, and the patient a few moments afterwards left my office, with instructions to report on the following morning, at the same hour. When she came the next day, at 9 o'clock, her pupils were widely dilated and her accommodation completely suppressed; in other respects she showed no evidence of the effects of the duboisia. The account which she gave of her previous day's experience, however, was rather startling: After leaving my office she had walked about half a mile to the place where she was employed. Just before reaching there she felt a little giddy, and she experienced some difficulty in ascending several flights of stairs to the cloak room. From here she descended to the work-room, and took her seat at a sewing machine. Scarcely had she done so, when she became so

giddy and faint as to be unable to maintain an erect position, and, according to her own account, twice she did actually faint. Those about her became greatly alarmed at her condition, which they could in no wise account for, and a carriage having been procured, she was carried down stairs, placed in it, and driven to her home. About the time she was placed in the carriage she began to lose consciousness, and during the remainder of the day she was mildly delirious.

Between 2 and 3 o'clock in the afternoon she was seen by Dr. Alfred H. Powell. The severity of her symptoms, as I subsequently learned from Dr. Powell, had then considerably abated; her face, however, was still flushed, and her mind was wandering, though she was able to reply to his questions intelligibly. She did not complain of dryness of throat, and her pulse at that time showed no appreciable disturbance. When directed to walk, she did so, but with the staggering gait of a drunken person. From the state of her pupils, and her other symptoms, Dr. Powell concluded she was under the influence of atropia but as she was recovering satisfactorily he did not consider any antidotal treatment necessary. On the following morning, as I have said, she was able to come alone to my office, the effects of the duboisia being visible only in the dilated pupils and the paralyzed accommodation. Four days after this, although the pupils were still much dilated, the ciliary muscles had so far recovered that with her astigmatism corrected (l. eye, — $\frac{1}{11}$ c \ominus + $\frac{1}{18}$ s; r. eye, — $\frac{1}{11}$ c \ominus + $\frac{1}{18}$ s) she was able to read with tolerable fluency S 1 $\frac{1}{2}$.

I should add that, a few days before this occurrence, I had used the same solution of duboisia, in precisely the same way, in the case of a young man with hypermetropic astigmatism, without inducing the slightest constitutional disturbance.

The very unpleasant action of the duboisia in the case I have related suggested the inquiry. Is it necessary to employ so strong a solution, as was made use of in this instance, and as has been generally recommended, (gr. iv to 3i) in order to obtain complete paralysis of accommodation? To determine this point in a more satisfactory manner than I could otherwise do, I concluded to make the test upon my own eyes, and for this purpose I dropped into each eye one small drop of a solution containing but *one grain of sulphate of duboisia to an ounce*. Before the application, my binocular near point of distinct vision (tested with S 1½) was at 4". In seven minutes both pupils were markedly dilated, and the accommodation already sensibly impaired, so that I could scarcely make out at any distance the letters which I had just read at 4". At the expiration of one hour and seven minutes, accommodation was so completely suppressed that a —⅞ spherical glass reduced distant vision from $\frac{20}{\infty}$ to $\frac{20}{11}$, and I was conscious of an utter inability to neutralize in the smallest degree the very feeble action of this, the weakest of my trial glasses. Although the letters were very indistinct, I could still decipher S 6½. Three hours after the instillation the effect upon the accommodation was still more profound: letters of S VIII, held at arm's-length, were scarcely distinguishable, and J no. 15, so blurred as to be made out with difficulty. Tested with +⅛ glass and S 1½, suppression of accommodation, even with convergent optic axes, was at this time found to be complete.

At the end of nine hours slight recovery of the accommodative power was observed, and at the end of fifty-seven hours I could again make out words of S 1½, although not until the fifth day did the pupils regain their normal size and the ciliary muscles their customary activity.

This experiment convinced me that, at least, it was not always necessary, in order to completely paralyze the accommodation, to employ duboisia in the strength of four grains to the ounce; and I began, thereafter, to use, instead, solutions of but one-half, and even one-fourth, this strength. Within a day or two after the experiment upon my own eyes, I succeeded so well in suppressing the accommodation of a girl, 16 years of age, by a single application to each eye of two drops of a one grain solution, as to enable me to obtain a very satisfactory result in correcting by glasses an extreme case of compound hypermetropic astigmatism. As a rule, however, when resorting to duboisia in such cases, I have preferred to employ a two-grain solution, and when practicable to have this applied several times (one drop into the eye at each application) before determining the state of refraction.

In the treatment of inflammatory affections of the eyes, I frequently substitute duboisia for atropia, and under such circumstances I commonly employ a four grain solution, no unpleasant effects having resulted therefrom. Occasionally solutions of atropia are not well tolerated, and especially after having been used for some time set up considerable conjunctival irritation; in these cases the substitution of duboisia is often of great advantage. Furthermore, I have in one instance, in which there existed severe inflammation of the cornea and iris, seen dilatation of the pupil, with yielding of numerous adhesions, promptly follow the instillation of a four-grain solution of duboisia, although a solution of atropia of equal strength had been applied every four hours for six days, previously, without producing any appreciable mydriasis.

Briefly summarized, the conclusions to which I have been led by my experience with duboisia in ophthalmic practice are as follows:

In duboisia we have a valuable addition to our list of ophthalmic remedies—

1. Because of its (compared with atropia) less persistent action upon the pupil and ciliary muscle, which renders it especially useful for paralyzing the accommodation preparatory to testing for errors of refraction. 2. Because in certain cases, in which the eyes are intolerant of atropia, it may be substituted with advantage for it. 3. Because it will sometimes produce dilatation of the pupil when atropia fails to bring about this result; although, as a rule, its mydriatic action is probably not more powerful than that of atropia.

On the other hand, duboisia is much more apt to occasion unpleasant constitutional effects when applied to the eyes than atropia. It should, therefore, be used with greater caution, and should not be substituted for atropia except for some good reason; and in young children and very old persons its use should be especially avoided.

It is more likely to affect the system when applied to non-inflamed eyes, for the purpose of facilitating tests for errors of refraction, than when used in cases of iritis, keratitis, etc. In the latter class of cases it may be employed with safety (in adults, at least,) in the proportion of four grains to the ounce; but, if applied in this strength, even in the most cautious manner, to eyes which are not inflamed, it will impress the system unpleasantly in a considerable percentage of instances.

A two-grain solution will usually produce complete paralysis of accommodation. When, therefore, duboisia is used for this purpose, a solution of greater strength should not, as a rule, be employed. Exceptionally a four-grain solution will be required, but it should not be resorted to until the weaker one has been tried.

The effects of duboisia upon the ciliary muscle are felt most profoundly two or three hours after its application

to the eyes; less profoundly after the expiration of ten or twelve hours. When it is desirable to bring about complete suppression of accommodation, preparatory to testing for complex errors of refraction, a single drop of a two-grain solution should be applied to each eye, at bed time, the day before the examination is to be made; and this should be repeated in the morning, and again about one hour before the examination is begun.

The unpleasant effects of duboisia upon the system manifest themselves within one hour after it is applied to the eyes; and this should be taken into consideration in prescribing it.

CLINICAL LECTURES.

A CLINICAL LECTURE ON SYPHILITIC HEADACHE.

BY I. EDMONDSON ATKINSON, M. D.,

Professor of Pathology and Clinical Professor of Dermatology in the University of Maryland, School of Medicine.

Gentlemen:—The patient before you comes to us from the country, and is about 35 years of age. He is, as you see, a man of medium size, and moderately well nourished. The complaint, for the treatment of which he entered our wards, was an intolerable bi-parietal headache that had lasted day and night for six or eight weeks, and from which he could obtain hardly a moment's relief. He complained of no other unpleasant symptoms than some loss of appetite and slight constipation. He had no fever. His expression, though indicative of suffering, was not bad. There was, and still remains, a small amount of whitish fur upon his tongue. His headache was said to be continuous, and was no better during the day than at night. But little sleep could be had without the use of opium. You noticed the look of suffering he continually wore, and with what despair he would for several days reply to my inquiries. Upon further examination it was ascertained that he had had a chancre about 16 years ago, and subsequently various manifestations of constitutional syphilis, cutaneous eruptions, sore

throat, etc. He had never suffered from a headache similar to the present one. At our first visit his voice was wheezy and he complained of laryngeal soreness, and it was noticed that the left side of his face was rather flaccid, his cheek hanging lower than upon the other side. His left eyelid, likewise, drooped. Pretty good control was retained over the muscles of these parts, and we could not learn that they ever had been completely paralysed. His pupils were equal and dilatable. He had noticed this condition of his cheek and eyelid about two months ago, after his attention had been directed to it by his physician. Ever since his headache began he had been taking potassic iodide in doses of from five to eight grains thrice daily. His urine was free from albumen.

These were the symptoms, then, from which we had to make up our diagnosis: constant, intense, bi-parietal headache, and a partial paralysis of the third and seventh cranial nerves. This combination of itself would probably have enabled us to determine the nature of the trouble without the history. But with it we need not hesitate at all. Our patient has syphilitic headache. Now, syphilis may cause headache in more than one way and at different stages of its progress. Headache may proceed from syphilitic disorder of the trigeminal nerve. It may be due to the pain arising from pericranial inflammation in the early stage, or to pericranial, cranial, or intra-cranial gummy tumors and infiltrations in the later or tertiary stage. Finally, it may be present at any stage of the malady, from the earliest prodromal, to the latest tertiary symptoms, without affording during life or after death any trace of a tangible cause for it.

Syphilitic neuralgia is sometimes observed to affect the supra-orbital branch of the fifth nerve, and when it does, it may be very like headaches of intra-cranial origin, or of those due to cranial or pericranial syphilitic disease. From the latter it may be distinguished by the absence of the areas of thickening and deposit characteristic of these. From intra-cranial headache it will often be very difficult to distinguish, and the greatest care must be exercised. This form of syphilitic neuralgia is more apt

to affect those who are subject to simple neuralgias, to implicate one side of the head, and to be less continuous and agonizing than the intra-cranial headaches.

Headache due to inflammation of the pericranium, or to gummy tumors or infiltrations of the cranium, may be very intense and persistent, and may betray the nocturnal exacerbations so characteristic of syphilitic pains. From an extreme degree of suffering it may shade off to a very mild feeling of discomfort. But whatever its degree, it usually indicates its origin by the localized tenderness and enlargements readily detected by the examining finger.

The forms of headache, to which I wish to especially call your attention now, may occur at any period of constitutional syphilis, and may be accompanied by no lesions discoverable after death; or they may be caused by extensive meningeal and cerebral alterations. Undoubtedly it is unlikely that such grave symptoms could exist as purely functional disorders, and it is more than probable that even in the earliest stages of syphilis a certain degree of meningeal congestion is present to account for them. Very many syphilitics suffer from these headaches, which may vary from a slight uneasiness to the most intolerable suffering. The patient feels that these pains are inside of his skull.

It is difficult to imagine greater agony than is encountered in the severer forms of this affection. The pain, which is usually frontal, but may be parietal or even occipital, may render the patient totally incapacitated for work, and may reduce him to extreme cachexia. He tosses about his bed in excruciating pain or rushes up and down in desperate agitation. His head seems to be bursting, or with each pulsation of his heart he feels as if struck with a hammer. Fortunately these most severe forms are rare, and it is not often that a higher degree of pain is felt than our present patient has endured, though, doubtless, he will tell you that it was well-nigh intolerable. Ordinarily, the pain is a dull ache that accompanies the patient wherever he goes, yet does not prevent his attending to his business; but it differs from headache in its duration, constancy and, as we shall presently see, in being usually

worse at night. When it is present during the early secondary period, it usually belongs to the class, where, so far as our powers of observation go, recognizable causes for it do not exist.

It may be the first symptom of the general manifestations and is then recognized with difficulty. One may be easily misled. Some years since, I was called to see a young woman who had been growing ill for several days. She had moderate fever with decided evening exacerbation; her features were heavy and without intelligent expression. She presented a decided typhoid appearance. Her tongue was brown and coated. Above all, she complained of headache in her frontal region of an agonizing character. This pain increased from day to day, until it so far surpassed the usual intensity of headache, that I began to suspect that it might be of syphilitic origin, and that my patient had prodromal syphilitic fever. The circumstances were such that direct questions were not practicable. Acting upon my suspicion, I gave appropriate anti-syphilitic treatment, and was, in a few days, charmed to find the symptoms rapidly subsiding. In a week or two an attack of iritis and a papular syphiloderm confirmed completely my diagnosis.

Neither the patient just mentioned, nor the one before you, presented one most characteristic symptom of syphilitic headache, a profound tendency towards nocturnal exacerbation. In the majority of cases this is a most striking feature, and one that you should never neglect to inquire after; for when present it will put you far on your road to a diagnosis. During the day the pain may be quite bearable, but at nightfall or towards bedtime, will become dreadfully severe, lasting until near morning, when it will cease or become alleviated. Strangely enough, it is said that those whose occupations require their attention during the hours of night, will often experience their paroxysms during their resting hours in the day time. From my own observation I cannot speak positively of this.

During the early stages of secondary syphilis, these headaches are usually self-limited; they will behave after the manner of all secondary manifestations. During

the late periods of disease, headache may become very chronic, lasting weeks, months, even years. It has not been very long since I attended a young married woman, who consulted me solely on account of severe and long-continued headache. She had had it, with but slight intermission, for four years, during which time she had aborted five times. She had a dull, dazed expression and was decidedly cachectic. She was three months pregnant. So far as I could learn there had been no recognizable syphilitic symptoms. Her headache had a decided night exacerbation. Anti-syphilitic treatment was instituted, and the headache promptly amended and soon ceased. She continued under treatment and was delivered of a healthy child at term.

While there can be no doubt that in the early stages of constitutional syphilis headache may exist without more than congestive intra-cranial disorder that will disappear without leaving traces, later on the pain is apt to be associated with very positive meningeal or cerebral alterations. Many cases, indeed, even *very* old ones may reveal no post-mortem appearances to account for the symptom; but in these later stages, of which I am now speaking, the headaches are unusually symptomatic of grave inflammatory or neo-plastic processes. Our present patient, as we may conclude, from his paralysis, has had, probably, a basilar meningeal, gummatous, diffused infiltration, and it is reasonable to conclude that similar changes in the meninges of the convexity of his brain have taken place. Sometimes we are certain that the headache is but one of a complex of symptoms due to extensive intracranial syphilitic processes; as, for example, when it is associated with epilepsv, various motor and intellectual disorders, etc., or where inflammatory infiltration is attested by fixed, circumscribed pain over the part affected, which is clearly not due to peri-cranial or superficial cranial disease.

Are there any signs by which syphilitic headache may be distinguished from other headaches? It will often happen that the associated train of symptoms is such that there can be no doubt as to the diagnosis. But it has been claimed that there are signs, which, of them-

selves, point to a syphilitic origin of the pain. These are the intensity of the suffering, its long continuance and the distinctly marked tendency toward nocturnal exacerbation. Any or all of these features may be absent; the pain may not be intense; the long continuance manifestly only becomes an occasional element in the process; and nocturnal exacerbations may be wanting. Under these circumstances, when no collateral evidence comes to our aid, doubt may be dispelled by the result of treatment. You have often heard me discountenance the use of iodide of potassium during the early period of syphilis; you have heard me say that then its efficacy is almost *nil*. I make an exception in its favor in the treatment of syphilitic headache in the secondary period. Here it is of undoubted value, and may always be employed with advantage. But its value is not comparable to that of mercury during this stage. After a few days devoted to a mercurial course, the headache of early syphilis will speedily disappear, iodide of potassium being often of manifest advantage as an adjuvant. The headaches of late syphilis, like other late lesions, become more amenable to the iodide, though if we desire to take advantage of the chances of permanent improvement, which, in tertiary syphilis, are, at least, but slim, the use of mercury should not be neglected.

Regarding the use of iodide of potassium in these cases, I wish to utter one word of caution. You noticed the disappointment with which our patient heard me prescribe iodide, and that he observed that he had been taking that drug off and on ever since his headache began, without benefit. I was prepared for his objection and asked the doses he had been taking. He replied that he had been taking from five to eight grains thrice daily. These doses in many, nay in most, cases of central syphilis are totally inadequate. I, therefore, ordered twenty grains thrice daily in the confident belief that that or a larger dose would soon prove effective. The result has justified my expectations, and to-day he expresses himself as being free from pain, and feeling so well that he thinks of returning home. Do not forget, then, in late and especially in nervous syphi-

lis, very large doses are often required; and that obstinate cases cannot be decided to be not syphilitic, until the remedy shall have been used in adequate amount.

CORRESPONDENCE.

CAPON SPRINGS AS A HEALTH RESORT.

Capon Springs, W. Va., }
Sept. 10th, 1881. }

Messrs. Editors:

At the base of the western slope of the North Mountain, in the county of Hampshire, State of West Virginia, twenty-seven miles from Winchester and seventeen from Strasburg, places well-known for war reminiscences, are located the celebrated Capon Springs and Baths.

History informs us that upwards of seventy-three years ago one Henry Fry first discovered the valuable properties of the Capon waters, from which circumstance the place was for some time known as "Fry's Springs." The early settlers of this country made frequent visits to these waters and soon established a wide reputation for their remedial value. Accommodations suitable for guests were in time erected, but these soon proved insufficient to lodge the increasing crowd which annually resorted to the place. During the year 1851, or thereabout, a stock company was organized, and the "Mountain House," with a capacity for six hundred guests, was erected at great cost. This fact at once gave prominent attention to the Capon waters, which now for a period of thirty years have drawn a large company of invalids and pleasure-seekers to this place. A bathing establishment was erected by the State, which is held in trust by a board of trustees, the revenue from which is required by law to be perpetually expended in beautifying and improving the bath property. The Capon Springs and

Baths were early accorded a large share of public patronage, and in *ante bellum* days enjoyed a reputation unsurpassed by any watering place in the South. The wealth and intelligence of the North and South met here during the season in pleasant social relations and gave to Capon a historic interest and national reputation which to this day have made it one among the most popular and attractive summer resorts in this country. Capon enjoys not only the advantages of an attractive summer home, but the charm of "health-giving" fountains, which pour forth in bold streams from the mountain sides mineral waters unsurpassed for medicinal value, in certain forms of disease, by any stream in the United States or in the old world. The Capon waters have a value peculiar to themselves, and in their effects upon certain maladies may be classed as specifics. They are not specific for all diseases. On the contrary their action in certain affections is hurtful and contra-indicated. Your correspondent might refer at some length to the charm of this place, to its pure air and bracing climate, to its wild and varied beauty, to its walks and rides, or to the social atmosphere which pervades this popular retreat among the mountains, but he fancies your readers will be less interested in this subject than instructed by a practical presentation of the therapeutic effects of the Capon waters.

The physician engaged in large practice is almost daily consulted by anxious patients in respect to the remedial value of mineral waters. He often ponders in his mind whether this water or that water is indicated in the case under special consideration. Vague rumors are afloat that natural combinations are more efficacious than the prescribed formulæ from the drug-shop, and it does happen that public attention, of late years, has been largely directed to various health resorts and invalid retreats, as the last

hope of relief from the "ills flesh is heir to." Year by year thousands of invalids seek a temporal home at the seaside or among the mountains in search of the health-giving principle which is said to reside at these different places. Many go without definite plans and in comparative ignorance of the effect or influence of the place. Others are directed by conscientious medical advisers who often, upon mere heresay evidence, prescribe this place or that place, without knowing the true character of the waters or their physiological or therapeutic effects. It is a conceded fact that but few medical men have given close study to the effects and action of the mineral waters of this country or are prepared to speak intelligently or advisedly in reference to them. A few of the more prominent waters have received careful clinical study, but a knowledge of the action and value of many well known and frequently patronized springs is extremely limited. General impressions prevail but definite information is wanting. The time is near at hand when the mineral springs in this country will claim and receive a larger share of clinical study. It is universally admitted that we possess in mineral waters agencies of the greatest value in the treatment of many forms of disease. The combinations which nature presents to us in this form are almost beyond comprehension when their effects upon the human economy are considered. The power and virtue of these subtle forms are to be determined by clinical evidence rather than by chemical analysis. For example, the Capon water contains only about twelve grs. of inorganic matter to the imperial gallon, yet a most copious purging has been induced by less than two ounces of this water. The only proof of the virtue of the Capon waters will be found in a careful study of the diseases most favorably influenced by its action. The Capon waters belong to

the class of "alkaline carbonated waters," which rank high in therapeutic value, and include many of the most noted waters of this country and Europe. They are similar in their effect to the Vichy of France, the Carlsbad of Germany, and the Bethesda of Wisconsin. From the well known action of these waters it will be perceived that the Capon waters are applicable to a large number of conditions.

The writer has watched with much care the physiological action of these waters. Observation shows that their effects vary markedly with individuals. With the larger number the primary action is upon the digestive apparatus, inducing slight disturbance of the stomach, followed by free catharsis, accompanied, in some cases, with griping pains. The stools are frequent, copious and freely colored with bile. Purgation continues until the contents of the intestines are well evacuated. Occasionally a mild astringent is required to restrain the diarrhoea, but as a rule it ceases within twenty-four hours. With a smaller number of individuals the digestive apparatus is not in the least involved, the entire action of the water being confined to the kidneys, inducing greater or less determination of blood to the organ, sensations of weight and pain in the lumbar regions and copious diuretic action. The urine is abundant in quantity, very high colored, and characterized by copious deposits.

In a few individuals the waters seem devoid of effect, the bowels and kidneys remaining undisturbed. In these cases an occasional laxative or diuretic is indicated. A free purgation with calomel or blue mass has a decided influence in removing a torpid action of the intestines and in inducing a response to the waters.

The groups of disease in which the Capon waters will be found beneficial are those affecting the digestive or-

gans, the urinary organs and the reproductive organs. In dyspepsia, constipation and disorders of the liver, accompanied by a torpid or unhealthy biliary secretion, the waters may be used with marked advantage. This is especially true of that form of dyspepsia in which there is an excess of *acid* secretion or in those catarrhal troubles which occasion so much annoyance and render life burdensome. The laxative action of the waters has a tendency to overcome the severe forms of constipation and to bring about a healthy condition of this function. The relief to this habit is noticeable in a number of cases.

From the well known action of these waters as a laxative, alterative and diuretic, it might be inferred that they are of decided value in the cure of chronic rheumatism, rheumatic gout, and other troubles resulting from tardy and imperfect action of the organs of secretion and excretion. Such, in fact, is the case. The writer has observed most striking results in cases of rheumatic gout, syphilitic rheumatism, and chronic inflammation, induced by the use of these waters and baths. Individuals who came to the place as nearly helpless invalids from rheumatic gout and syphilitic rheumatism have been known to return home, after a six weeks residence, entirely relieved and restored to sufficient health to resume the duties of business. In syphilitic rheumatism, especially, has this effect been noted. These cases have not relied absolutely upon the use of the waters and baths, but have adhered to large and continuous doses of iodide of potash which is borne with freedom from the unpleasant action of this drug. From this fact credit must be given to this faithful "specific," and to the Capon waters for their influence in sustaining its action and in its elimination from the system. The writer is well convinced that this unfortunate class of patients will find as good results from

the use of Capon waters and baths as can be secured from the waters of the Warm and Hot Springs of Virginia and Arkansas. As an evidence of this fact additional testimony will be offered at a future day by a relation of cases.

The Capon waters first secured fame for their influence in kidney and vesical troubles, especially in calculous affections depending upon the lithic acid diathesis. Their alkaline and diuretic properties have brought relief and cure in chronic diseases of the kidneys, in catarrh of the bladder, in enlargement and irritation of the prostate gland, and in functional disturbance of the genito-urinary organs. The well known solvent action of these waters draws annually to the Springs cases suffering from nephritic and vesical calculi. The action of the waters dissolves the rough edges of the calculi, reduces their size and admits of their passage along the ureters and urethra with comparative ease. Two cases of this character are now here greatly improved in health and free from these sources of kidney and bladder irritation.

In all catarrhal troubles most decided improvement has been observed after a short residence. This has been especially noted in cases of nasopharyngeal catarrh, in chronic follicular pharyngitis, and in chronic cystic catarrh. The good results observed in these cases are justly attributable to the use of the waters and baths, as no other medication has been employed in a single instance. Reference should be made to the well known virtues of the Capon waters in uterine disturbances. In dysmenorrhœa, leucorrhœa, amenorrhœa and chronic cervical and corporeal endometritis, their action has been found reliable and beneficial. The writer has had but few opportunities for judging their effects over these disorders, but he is forced to accept the statements of medical men whose

large experiences confirm the above facts. Many cases of sterility are directly traceable to catarrhal affections of the uterus and to the acrid discharges resulting therefrom. To the relief afforded in these catarrhal troubles has undoubtedly originated the great reputation of the Capon waters in the cure of sterility. A sojourn at this place will convince the observer that this reputation is justly founded.

Reference might be made at some length to the local surroundings of Capon as offering special attractions to the invalid, but your space will not admit of lengthy details. At a future time your correspondent may take occasion to call attention to the excellent accommodations, superb climate, and the genial hospitality found here. The proprietor of the Springs is year by year making improvements and additions to the Springs property, which will, in the course of a few years, place Capon at the very head of the health resorts in this country.

Very truly yours,

A.

SOCIETY REPORTS.

AMERICAN DERMATOLOGICAL ASSOCIATION. FIFTH ANNUAL MEETING.

(Specially reported for the Maryland Medical Journal).

The American Dermatological Association met at the Ocean House, Newport, Aug. 30th, 31st, and Sept. 1st. The meeting was a most successful one, both in the character of papers presented and in the discussions resulting from them. The proceedings opened with an address of especial value and interest by the President of the Association, *Dr. J. Nevins Hyde*, of Chicago. It began with a reference to dermatological literature in special journals and those devoted to general medicine, and the desire was expressed for more extended knowledge upon matters of diagnosis in skin affec-

tions upon the part of the profession generally. Acne, eczema, rosacea, etc. are frequently mistaken for syphilitic affections, and errors of kindred nature are frequent both with the public and medical men. Stress was laid upon the importance of prophylaxis. In concluding this address (which will well repay perusal) Dr. Hyde, for the benefit of the general medical public, insisted that, because a disease exists, it does not necessarily demand treatment; that it should not be always considered easily curable by routine treatment; that after cure, relapse is just as apt to occur as in other diseases; that iodide of potassium and mercury are not necessarily called for in all skin affections; and, finally, that the profession requires more extended instruction in the nature and treatment of skin diseases.

The first regular paper was read by *Dr. C. Heitzmann*, of New York. It was "A Contribution to the Minute Anatomy of the Skin." In it, Dr. Heitzmann took the ground that the anatomy of the hair has been incorrectly stated and that he himself had followed too blindly the lead of Kölliker, Biesiadecki and others.

Recent work over this subject has convinced him that instead of the external root-sheath running down to the hair papilla, it becomes narrower as it stretches down the follicle and finally ceases before it reaches the bulb, while the horny layer of the epidermis, forming the internal root-sheath, becomes broader the nearer it approaches the base of the hair, while its cells become protoplasmic and like those of the mucous layer. The outer sheath, therefore, has nothing to do with the hair-bulb. It forms, however, the sebaceous gland. The hair is an elongation of the hollow, reflected inner root-sheath. The cuticula of the hair is the boundary between the inner root-sheath and the hair proper. This view was supported by microscopic specimens. The paper was variously discussed, but the strongest objection to it was made by *Dr. Wigglesworth*, of Boston, who was unable to understand how the pigment of the hair could be derived from the horny layer of the epidermis, since we know it is a mucous layer production. *Dr. James C. White*, of Boston, next read a paper upon "Limitations of In-

ternal Therapy in Skin Diseases." He referred to the wide differences of opinion regarding the value of internal remedies, and suggested the formation of a committee for the observation of the action of these agents. He spoke of the meagreness of definite information and the vagueness of opinions upon this subject, and did not hesitate to contradict those who claimed prime importance of internal medication in most forms of skin disease.

Dr. Van Harlingen, of Philadelphia, read an interesting account of a case of "Lymphangioma Cutis Multiplex." The patient, a woman, presented along with a number of fibromata mollusca, several tumors that he could only consider enlargements of lymph channels. These presented special features, the most notable ones being their emptying on pressure and their peculiar looseness of texture, whereby the finger pressed upon them appeared to pass through the derma.

The next paper was one by *Dr. Louis A. Duhring*, of Philadelphia, entitled "The Small Pustular Scrofuloderm." Under this title, Duhring describes a rare, chronic disease, characterized by very small, to ordinary pustules, usually upon the face and extremities. The eruption spots leave pits, which decidedly scar in healing. It is liable to be mistaken for the small papular syphiloderm at one stage of its formation. It is totally unlike acne cachecticorum, having recognized predilection for the sebaceous follicles.

The second day's morning session was devoted to a very interesting series of papers upon Leprosy, and to the report of the Committee on Statistics. This committee, through *Dr. James C. White*, has, during past years, collected an enormous amount of statistics concerning the prevalence of skin diseases in all parts of the country. The subject of leprosy has always received especial attention, and the committee was requested to bring together the large amount of information collected concerning the malady, in the form of a report at the next annual session.

Dr. Graham, of Toronto, contributed to the literature already in the hands of the committee, a complete record of the

statistics of the leper hospital in Tracadie since its beginning.

The first regular paper of the day was by *Dr. I. E. Atkinson*, of Baltimore, on "A Case of Tubercular Leprosy." This case presented the features and course of a typical tubercular leprosy. The especial occasion of its being reported was the great probability of its having been acquired through contagion. The patient had never been beyond the limits of Maryland, was of healthy parentage, and for a time had lived next door to a leper. The fact of leprosy never having been previously observed as originating in the State, and the extreme rarity of the disease, was considered to negative the probability of an accidental coincidence. *Dr. Atkinson* also read a paper by *Dr. I. Bermann*, of Baltimore, to whom excised tubercles from the patient had been submitted, wherein *Dr. Bermann* was able to confirm the discoveries of Hansen, Eklund, Neisser and others, of the bacillus leprae, a bacterium discovered in the cells of these tubercles, and considered the cause of the disease, by these writers.

The next paper upon the same subject was by *Dr. Jas. Nevins Hyde*, of Chicago. It was entitled "Study of a Case of Acute Tubercular Leprosy." The patient was a man, born in Belgium, of healthy parents. He had been for several years subject to certain obscure symptoms, but the disease underwent a sudden change and became most active. In the course of a few months the body, face and extremities, became covered with tuberculations of various size, rapidly growing, and many breaking down. The patient's health was soon destroyed and he died a few months after coming under observation. *Dr. Hyde* also read a paper by *Dr. H. D. Schmidt*, of New Orleans, on the Pathology of Leprosy. This was a very exhaustive paper, and included observations upon nearly all of the organs and tissues of lepers and will form a valuable contribution to our knowledge of the pathology of the disease.

The second day's proceedings were ended by a paper on "Buccal Ulcerations of Constitutional Origin" by *Dr. Edw. Wigglesworth*, of Boston.

The difficulties of diagnosis, between ulcers of lupous, tubercular, syphilitic and epitheliomatous nature, were pointed out. *Dr. W.* had found every reason to be satisfied in the treatment of syphilitic ulceration, with the use of iodine spray and insufflations of iodoform in addition to constitutional treatment. Cases recover much more speedily than when constitutional treatment, alone, is employed.

Dr. Heitzmann contributed as the first paper of the third day, one entitled "Clinical Experience in the Use of the Solution of Oxy-Sulphuret of Calcium" This preparation, represented by the well-known "Vlem-inckx's Solution," *Dr. H.* had used in a number of skin diseases with most gratifying results. His plan is to dilute the solution at first with eight parts of water and to apply it at night, the strength to be gradually increased to that of the pure solution. Psoriasis, acne vulgaris, chronic eczema of scrotum, rosacea and scabies, are all markedly influenced by this treatment. Tinea tonsurans is not greatly benefitted by it, but tinea versicolor will yield promptly to it.

Dr. Heitzmann also addressed the convention on the use of akido-galvanocautery (electrolysis) for epilation. His results have justified the highest claims made for the operation by its originators, and the perfect efficiency of the method, makes it a great triumph for American dermatology and opens a new field for the healing art.

The committee on the microscopic examination of a specimen of ainhum, presented to the association through *Dr. Hyde*, by *Dr. Da Silva Lima*, at the last session, reported through its chairman, *Dr. Heitzmann*. The report is an interesting one and important, since the conclusion is opposed to that of *Da Silva Lima*, who considers that the toe is constricted and finally separated through a process of fatty degeneration. This did not appear to be so to the committee, but the ap-

pearances presented no pathological changes to account for the result, which can only be explained by the supposition that a system of self-mutilation is practised by the negroes, who are subject to the affection.

This meeting concluded with an interesting exhibition of specimens, including *Dr. Heitzmann's* studies in the minute anatomy of the hair, *Dr. Duhring's* sections of the small pustular scrofuloderm and *Dr. Bermann's* demonstrations of the bacillus lepræ. A feature of this portion of the meeting was sections offered by *Dr. I. Bermann* as demonstrating the syphilitic fungus. They were examined with much interest. The discussions during the session were most important and instructive, but want of space compels us to refer the reader to the official record of the meeting.

The association adjourned to meet at Newport on the Wednesday nearest September 1st, 1882.

Officers for the ensuing year were elected as follows: President, Dr. James Nevins Hyde, of Chicago; Vice-Presidents, Drs. George H. Fox, of New York, and W. A. Hardaway, of St. Louis; Secretary, Dr. Arthur Van Harlingen, of Philadelphia; Treasurer, Dr. I. E. Atkinson, of Baltimore.

A.

EDITORIAL.

THE SUBCUTANEOUS INJECTION OF MERCURY.—The advantages of the hypodermic method of using medicines did not remain long limited to the use of morphia. By it a new field of therapeutic resource and research was opened which the pioneers of the profession were not slow to explore and cultivate. Among the drugs thus tested was mercury, mostly in the form of the corrosive sublimate. There were many reasons why it was especially desirable to utilize this method in the treatment of syphilis, a disease whose visible presence carries with it more of disgrace and humiliation than any other, and whose ravages are

often so terrific in their rapidity and destructiveness that time is an all-important factor in its therapeutics. It is not our intention to review the literature of this subject; suffice it to say that, whilst the advantages of the hypodermic administration of mercury were generally appreciated, and the very great desirability of finding a form of solution which would be free from the extremely irritating effects always hitherto observed, acknowledged, the extreme pain caused by the injection, together with the frequency of abscesses and ugly resultant cicatrices led to its invariable abandonment.

The subject has lately been brought forward again in France, in such a manner as to attract fresh notice and interest. In the séance of the Société des Hospitiaux of Paris, of July 8th and 22nd, M. Mauriceau gave the results of his experience in the use of a new form of mercury—the *peptonate*, or rather *mercurial peptone*—as he terms it. The fact that mercury is absorbed in the state of *albuminate* had already suggested the addition of white of egg to the solution in the hope of thus facilitating its absorption, and with better but still unsatisfactory results. Then Bamberger proposed the substitution of peptone for the albumen; acting upon this suggestion M. Mauriceau has had prepared a solution which he has employed with the results to be noted, and which is composed as follows: \mathcal{R} . Bichloride of mercury, gr. 150, Catillon's dry peptone, chloride of ammonium (pure), of each, gr. 225, glycerine and water, q. s. He began by injecting \mathfrak{m} xv of this solution, containing gr. $\frac{3}{16}$ of the sublimate, every third day. No ill effects being observed, the dose was increased to $\frac{1}{16}$, and finally to $\frac{1}{8}$ gr. and the injections were given daily. The solution which he was employing at the last report contained gr. $\frac{3}{8}$ to $\frac{1}{2}$ to every fifteen minims. The result of this treatment in M. Mauriceau's hands, deduced from an experience of 1900 injections, was most striking. There had been, he states, no local accident, nor abscess, nor induration, nor had salivation ever been produced. In the great majority of cases there had been no pain; in two or three only had there been a burning sensation, not severe, but lasting for several hours, and in five or

six others a slight smarting was experienced never of more than an hour's duration. These unpleasant sensations have become manifest after the first two or three injections, but have not persisted after the fourth. The seat of election with M. Mauriceau for the administration of the mercurial in this form, is the back between the scapulæ or in the lumbar region, on account of the cellular tissue there being loose and abundant. He insists that the needle should be sharp and that it should enter deeply into the tissues.

The mercurial thus administered appeared to M. M. to act more promptly and with more effect than when introduced by the stomach, and to be especially applicable to very grave cases, with threatening symptoms, where it is necessary to produce prompt and decided action. The procedure recommends itself moreover by the ease with which it is employed, and by the absence of pain and other bad consequences. M. Mauriceau proposes to continue his experiments and increase still further the dose of the sublimate. Making all allowance for M. Mauriceau's enthusiasm and prejudice in favor of a method of which he is himself the advocate, the results are too remarkable not to excite our deep interest. Whilst unwilling to accept all that M. Mauriceau has said, therefore, until confirmed by the experience and testimony of others, we cannot ignore the statement of any credible witness as remarkable as these. Who can say of the subcutaneous injection of morphia, which we use habitually and without hesitation, that he has administered it 1900 times without once producing an abscess, induration, or scar, and in only a very small minority of cases, with only a burning or smarting pain of no great severity?

In this connection it is of interest to learn that Lewin, of Berlin, is also popularizing this method in Germany, especially in hospital practice. We may add that there seems no good reason for limiting it to hospitals any more than in the similar use of other drugs. Wherever the patient is willing to submit to it and can be seen daily it may be resorted to.

INTERNATIONAL MEDICAL CONGRESS AND SIR JAMES PAGET.—The grand spectacle of the assemblage of over three thousand of the world's greatest physicians in the world's greatest city, from the 3rd to the 9th of August, was the cynosure of all eyes. Unquestionably, it had no parallel in the annals of our ancient calling. The representative medical men of all civilized nations were there—Virchow, Pasteur, Flint, Paget, Esmarch, Charcot, Billings, Jenner, and a great many more of those who give us our literature, who adorn and elevate our profession, and to whom we are accustomed to look up for counsel and instruction. The meeting was inaugurated in St. James Hall, London, with great formality by the Prince of Wales, in the presence of the Crown Prince of Germany. Then came that grand, eloquent, perfect address of the President, Sir James Paget, spoken, as we learn, from beginning to end without once hesitating or once referring to notes. Few men combine in themselves so many of those qualities, which excite our admiration and win our affections, as Sir James Paget. A scholar, orator, philosopher,—his mind seems to be always at an equipoise, that *medias res* of safety. There is none of the stoic in his nature, but alive to every thrill that moves the chords of human feeling, he illustrates well the sentiment of those oft-quoted lines of Terence: "*Homo sum: humani nihil a me alienum puto.*"

He carries with him our sympathy, because we feel that he is one of us and is pleading the cause of humanity not of self. What a grand sight, to behold one crowned with age, and still not incapable of the enthusiasm of youth or indifferent to the progress of science. May his closing words long linger in our memories and be the motive of our lives and conduct: "Let us then resolve to devote ourselves to the promotion of the whole science, art and charity of medicine. Let this resolve be to us as a vow of brotherhood, and may God help us in our work."

THE BACILLUS LEPRÆ.—The discovery of the bacterium, which is supposed to be the essential factor of leprosy, by Dr. Isadore Bermann, of this city,

formed the subject of a communication made by him to the American Dermatological Association at its recent meeting, to which allusion is made in the report of that meeting in our present issue. This discovery was not original with Dr. B., having been previously made by microscopists abroad; nevertheless being the result of independent observation it is highly valuable as confirming these previous investigations. The tubercular tissue from which the specimens were obtained was derived from the ear. The bacteria which the writer has had the pleasure of examining (through the courtesy of Dr. Bermann) present, under powers of the microscope varying from 580 to 1600 diameters, the appearance of minute straight dark lines, technically called "rods." They are collected into separate groups scattered through the cellular and fibrous tissue of the part and resemble more the clippings of the beard when it has been trimmed than anything else to which we can liken them. In view of the supposed contagious nature of the disease the precaution had been taken to destroy the vitality of the bacteria utilized in this case for exhibition. In this connection we may recall similar researches of Dr. Bermann in connection with the bacteria of syphilis, which, however, vary in size, in grouping, and in other respects, from those described above.

DEATH OF PROF. E. LLOYD HOWARD.

—We grieve to have to announce the sudden death, by drowning, on the 5th instant, of this eminent physician, one of the most useful, able and influential members of the profession in this State. Want of space compels us to say no more of him at present, and to defer the publication of the obituary notice intended for this issue until our next.

MEDICAL PROGRESS.—The progress which has been made from conditions of vagueness to conditions of exactness has, in many respects, been greater in these twenty-five years than in the twenty-five centuries which preceded them.—*Simon, Int. Med. Congress.*

REVIEWS & BOOK NOTICES.

A System of Surgery, Theoretical and Practical, in Treatises by Various Authors. Edited by T. Holmes, M. A. Cantab. First American from Second English Edition. Thoroughly revised and much enlarged. By JOHN H. PACKARD, A. M., M. D., &c., assisted by a large corps of the most eminent American surgeons. In three volumes with many illustrations. H. C. Lea's Son & Co., Phila., 1881. Vol. 1, 8vo. pp. 1007.

The first edition of this standard work on surgery appeared in 1860, the second, of which this is a revision, nine years later. The object of the present edition is to bring the work up to the present date, and at the same time to render it more available and to adapt it more thoroughly to the wants of American physicians. With the exception of two articles (upon Diseases of the Skin and Absorbent System, respectively,) the text of the English edition is given unaltered, the comments or additions of the American revisors being simply interpolated enclosed in brackets. The five original volumes have been compressed into three. Each volume contains its own index, and at the close of the whole there will be a general index. Vol. 1 treats of general pathology, morbid processes, injuries in general, complications of injuries and injuries of regions. It represents the labors of sixteen revisors and contains seventy-eight added illustrations. The revision, to judge by vol. 1, has been carefully and faithfully made, and the conciseness, simplicity of style and ripe judgment, characteristic of the labors of the original authors, are conspicuous also in those of their present successors.

Coulson on the Diseases of the Bladder and Prostate Gland. Sixth Edition. Revised by WALTER J. COULSON, F. R. C. S., surgeon to St. Peter's Hospital. Wm. Wood & Co., New York, 1881. 8vo. pp. 393.

Twenty-three years have elapsed since the appearance of the last edition of this work, which may for this reason and because of the extensive additions and alterations to which it has been subjected be regarded as virtually a new work.

The chapter on the chemistry of the urine has been omitted, and others on the anatomy, physiology and modes of examination of the bladder and prostate have been added. A chapter is devoted to Bigelow's operation of litholapaxy, which "bids fair to create a complete revolution in the doctrines hitherto current with regard to lithotripsy." Sixteen of the twenty-two illustrations refer to calculi and operations for their removal. We are much surprised to see no allusion to Prof. N.R. Smith's lithotome. The author has labored to condense into this volume all that is practical or useful in the literature of the subject. The extent of his researches is shown by the fact that upon one page alone *seventeen* authors are distinctly referred to. The work commends itself by its thoroughness, by the extent of the information which it contains and by the absence of dogmatism in its author.

The Compend of Anatomy. For use in the dissecting room and in preparing for examination. By JOHN B. ROBERTS, A. M., M. D., Lecturer on Anatomy, &c., Philadelphia School of Anatomy, &c. Second Edition Revised. G. C. Roberts & Co., Philadelphia, 1881. 12mo. Pp. 198.

That there is a demand for such a work is proven by the appearance of a second edition within a few months from the publication of the first. Its convenience of size, portability and cheapness, are advantages which students will readily appreciate, although its utility in the dissecting room is limited by the absence of illustrations which will lead those engaged in dissection generally to seek the aid afforded in this particular by the larger works.

Of course strict accuracy in such a work is a *sine qua non*; hence our unqualified approval must be withheld in view of the following statements:

"The smallest bundles are composed of small fibres or fibrillæ *each one* surrounded by the sarcolemma" (p. 55); "to secrete the gastric *mucous*" (p. 159); "the arch extending from the heart to the lower border of the *fourth* dorsal vertebra" (p. 90); the skin is spoken of as the *sole* organ of touch (p. 186), etc.

The Mother's Guide in the Management and Feeding of Infants. By JOHN M. KEATING, M. D., Lecturer on the Diseases of Children at the University of Pennsylvania, &c. H. C. Lea's Son & Co., Philadelphia, 1881. 12mo. Pp. 118.

This book was written, we learn, at the solicitation and for the use of certain young mothers who have placed themselves and children under the author's care. It deals with the infant before, during and after early dentition, and enlightens the mother in regard to many things which concern the health and happiness of her baby, but in regard to which she is not likely to gain full and correct information except from reliable works like this. To say that there is room for improvement does not detract from the undoubted merits and capacity for doing good of the book.

First Annual Report of the Astronomer in Charge of the Winchester Observatory of Yale College. By LEONARD WALDO. New Haven, 1881. 8vo. Pp. 32.

The thermometric bureau was established in 1880 for the purpose of providing a reliable means of verifying thermometers. Its need will be apparent when we learn that there is no common standard in this country, and that most of the clinical thermometers in use here are utterly unreliable. The necessity of subjecting the glass tubes to a long-continued seasoning process in order to prevent future changes in them is insisted upon. Physicians may send their thermometers to the bureau for comparison with the observatory standard, and if accompanied by fifty cents each they will be returned in three days with a certificate showing the corrections to be applied.

The announcement of the *Baltimore Medical College* has appeared. Both sexes are admitted, and dentistry forms part of the curriculum. A preliminary examination in English is required, and for graduation attendance upon two annual sessions. It is not stated where the lectures will be delivered. The first session will begin October 1st, and last five months.

MISCELLANY.

DRAINAGE IN ABDOMINAL SURGERY.—While in general antiseptic surgery drainage is so very essential—is indeed, a fundamental part of the system—in my own experience of ovariectomy, and of the removal of uterine tumors, antiseptics have abolished drainage. I have not used a drainage tube for more than three years.—*T. Spencer Wells, Int. Medical Congress.*

BENEFITS OF THE ANTISEPTIC METHOD ILLUSTRATED BY COMPOUND FRACTURES.—The mortality after compound fracture had, during the labors of my predecessor as well as during my own, reached the sad height of forty per cent. When I adopted the antiseptic treatment of wounds, my last twelve patients, with compound fracture of the leg, had all died of pyæmia or septicæmia. From that time up to the present day I have treated, one after another, one hundred and thirty-five compound fractures, and not a single patient has succumbed to either of those accidental wound diseases; one hundred and thirty-three were cured, two died, one of fatty embolism of the lungs, during the first few hours; and one, a drunkard, of delirium tremens.—*Volkmann, Idem.*

KEITH ABANDONS THE SPRAY.—Dr. Keith stated that with it, after having a succession of eighty successful cases, he had five deaths in the next twenty-five cases: two from carbolic-poisoning, one from septicæmia, and two from acute nephritis. On account of this mortality, and of the very frequent high temperature the evening after the operation, he had abandoned the spray in all operations, and had only had one death out of twenty-seven ovariectomies without the antiseptic treatment.—*Proceedings Idem.*

INFLUENCE OF MILK IN SPREADING ZYMOTIC DISEASE.—The three diseases which have as yet been recognized as capable of being spread by milk, are typhoid fever, scarlatina, and diphtheria. There is nothing in the analogy of epidemics to limit the list permanently to these; and already there are indications of other cognate diseases being spread by the same agency. The number of epidemics of typhoid fever recorded in the abstract as due to milk is 50, of scarlatina 14, and of diphtheria 7. The total number of cases traced to the drinking of infected milk occurring during the epidemics may be reckoned in round numbers as 3,500 of typhoid fever, 800 of scarlatina, and 500 of diphtheria. As regards typhoid fever, the most common way in which the poison has been observed in these epidemics to reach the milk is by the soakage of the specific matter of typhoid excrements into the well-water used for washing the milk-cans and for other dairy purposes, and often, it is to be feared, for the dilution of the milk itself.—*E. Hart, Idem.*

LOCAL TREATMENT OF DIPHTHERIA.—There was an almost complete unanimity against the forcible removal of false membranes or the cauterization of the affected surface. Ice in the early stages, steam inhalations, with or without antiseptics, in the latter stages, were generally recommended. Lactic acid and lime-water were praised as being the best solvents, and boracic acid as an antiseptic.—*Proceedings, Idem.*

HUXLEY PREDICTS.—Huxley predicts that, in the progress of medicine, it will become possible to introduce into the economy a molecular mechanism which, like a very cunningly contrived torpedo, shall find its way to some particular group of living elements, and cause an explosion among them, leaving the rest untouched.—*Idem.*

**SALICYLATE OF SODA FOR FERMEN-
TATION OF URINE.**—Dr. W. Rob-
erts drew attention to the presence of
bacteria in the bladder, giving rise to
fermentation of the urine and vesical
irritation, a condition removable in a
few days by thirty-grain doses of sal-
icylate of soda twice a day.—*Idem.*

"HODGEN'S" ANTERIOR SPLINT.—
In one of the beds, a specimen shows
the method of applying a "Hodgen's"
(Smith's) splint (modified by Bloxam
and others) to a fractured thigh. The
limb is swung in a wire cradle, with flan-
nel understraps, and the long splint,
with its elaborate bandages, is entire-
ly dispensed with. In a compound
fracture, the wound can be got at with-
out disturbing the limb; and the only
drawback is, that a certain amount of
lateral movement is permitted between
the fractured ends of the bone.—*Ex-
hibition Idem.*

In lithotritry it is probable that a
great and real advance has been made,
and certainly it is undoubted that a
complete revolution has been effected
by the enterprise and skill of one of
our American brethern, for it cannot
be questioned that "Bigelow's opera-
tion" has completely changed the as-
pect of lithotritry, and there is every
reason to believe that it constitutes
one of those real advances in a meth-
od which marks an epoch not only in
the history of the operation itself, but
in the treatment of the disease to
which it is applicable.—*Erichsen Idem.*

I HAVE known the hearing in ap-
parently healthy subjects to be almost
completely lost on the witnessing a
sudden death of a near relative; on
several occasions immediately upon
the receipt of news of a painful nature;
in the case of women, upon the fright
produced by a cry of fire, or an alarm
of burglars in the house; at the wit-
nessing of the terrible sight of a man
cutting his throat; once on the re-

ceipt of great good fortune which
had not been anticipated. On each of
these occasions the hearing power of
the patient was always perfectly good
up to the time of the catastrophe, and
immediately afterward the deafness
was intense, so that the change in all
probability was almost instantaneous.
In passing, I suggest as a possible,
though imperfect and incomplete ex-
planation, that in the cases referred
to, a sudden hyperæmia in some por-
tion of the brain, or perhaps in the
medulla at the origin of the auditory
nerve, may account for a phenomenon
which we are not at present in a po-
sition to explain.—*Dalby, Idem.*

**IMPORTANCE OF THE RESULTS DE-
RIVED FROM VIVISECTION.**—In the
records of human industry it would
be impossible to point to work of more
promise to the world than these vari-
ous contributions (experimental re-
searches of Pasteur and others) to the
knowledge of disease, and of its cure
and prevention; and they are contri-
butions which, from the nature of the
case, have come, and could only have
come, from the performance of experi-
ments on living animals.—*Simon,
Idem.*

**ECHINOCOCCUS OF LIVER EXTRACTED
BY OPENING THE PLEURAL CAVITY.**—
In the case of a large echinococcus of
the liver, which in front and at the
side was covered with thick layers of
liver tissue, and which projected into
the thoracic cavity after resection of
the seventh rib, I opened the healthy
pleural cavity, which was free from
adhesions. The thorax was freely
open, the thinned diaphragm cut into,
the echinococcus sac opened, the ani-
mal bladder extracted *in toto*, and the
patient recovered without complica-
tion. A similar operation, with like
results, was conducted by Mr. Israel,
of Berlin.—*Volkman, Idem.*

I WILL conclude with an old apologue, which tells how when the fabled Arabian bird renewed each hundred years its vigor and eternal youth, the birds of the air all helped to build its nest. The eagle and the wren contributed alike to this labor of love and duty; each brought what he could, nor ceased till the task was done. And surely science and art—especially our science and art—are old and new: renewing day by day; burning, by a voluntary self cremation, old theories, half facts, hasty conclusions, and substituting more accurate observations, truer inferences, more solid judgments. To this great end we may all do something; but, labor as we may, our task will never be finished, for not once in a hundred years, as the fable runs, but every day and all day long, the process goes on: a daily death, a daily renewal, as in our body's growth—a death of error, a development of truth.—*West, Int. Med. Cong.*

FIRST TREATMENT OF WOUNDS IN BATTLE.—The bed shown by the hospitals of the army and navy illustrates the first treatment of wounds and fractures, and is a marvel of ingenuity. Esmarch's triangular bandages are used throughout, and we should especially direct attention to the treatment of fractured thigh. A rifle forms a long outside splint, a waist-belt supplies the place of a body-bandage, triangular bandages fix the impromptu splint to the thigh and ankle, and a third bandage is used as a perineal band; the same bandages serve to fix two bayonets to the arms, where they act as excellent splints; and a wound of the hand is also dressed with this bandage.—*Exhibition Idem.*

HALLUCINATIONS.—Fournié advocated the view which met with general acceptance that a hallucination was an act of over-vivid memory.—*Idem.*

MEDICAL ITEMS.

Dr. Jas. McHenry Howard has been promoted from assistant to chief Quarantine officer of Baltimore, vice Dr. E. Lloyd Howard, deceased. Dr. John A. Robb has been appointed assistant.—Dr. Wm. T. Montgomery, aged 40, a graduate of the Univ. of Md., 1851, died at Shrewsbury, Penna., Sept. 1st.—Dr. Frank Cockey, a graduate of the University of Maryland, 1874, died at Lutherville, Baltimore Co., Sept. 10th, of consumption, aged 28.—The Obstetrical and Gynecological Section, M. & C. F. of Md, will meet Friday, September 23rd, at 8 15 P. M.—The cultivation of Cinchona in India is proving very successful and profitable.—There are 13 medical societies in London.—Glasgow has three medical schools; and there is talk of amalgamating two of them.—The antiseptic method has elevated surgery to the rank of the least experimental science.—*Volk-mann.*—The statue erected to Harvey at Folkestone is a bronze figure, eight feet high, sculptured by the artist Albert Bruce Joy. It is placed on a granite pedestal, adjacent to Castle Hill avenue, facing the sea, and not far from the site of the house which was Harvey's birthplace.—If we desire to live broad and unselfish lives, we must be slow to condemn all those who entertain convictions which to us seem foolish or mischievous and logically untenable, or to refuse to cooperate with them.—*Bristowe.*—McEwen antiseptically has performed 835 osteotomies, of which 827 were healed without suppuration, and he lost no patient from the operation itself or from its consequences.—Lister does not accept irrigation as a substitute for the spray.—The annual dues of the College of Physicians of Philadelphia are \$15.—The British Med. Asso. has a balance of \$50,000 in its treasury.—The funded property of the Massachusetts Med. Soc. amounts to \$31,420.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

CURIOSITIES OF SUPERSTITION.

BY HORATIO R. BIGELOW, M. D., WASHINGTON, D. C.

In Sir John Sinclair's statistical account of Scotland, the Rev. Mr. Patrick Stuart, minister of Kellin parish, Perthshire, says: "There is a bell belonging to the Chapel of St. Fillan, that was in high reputation among the votaries of that saint in old times. It seems to be of some mixed metal. It is about a foot high, and of an oblong form. It usually lay on a grave-stone in the church yard. When mad people were brought to be clipped in the saints' pool, it was necessary to perform certain ceremonies, in which there was a mixture of druidism and popery. After remaining all night in the chapel, bound with ropes, the bell was set upon their head with great solemnity. It was the popular opinion, that, if stolen, it would extricate itself out of the thief's hands, and return home, ringing all the way. For some years past this has been locked up to prevent its being used for superstitious purposes."

A Bed-time Charm.—Ady, in his "Candle in the Dark," 4to. 1655, tells of an old woman he knew in Essex, who had lived in Queen Mary's time, and

thence learned many popish charms, one of which was this: Every night when she lay down to sleep she charmed her bed, saying:

Matthew, Mark, Luke and John,
The bed be blest that I lye on;

and this would she repeat three times, reposing great confidence therein, because (she said) she had been taught it, when she was a young maid, by the churchmen of those times.

Horseshoes.—"14th August, 1654," Evelyn says, "I took a journey into the northern parts. Riding through Oakham, a pretty town in Rutlandshire, famous for the tenure of the barons (Ferrers) who held it by taking off a shoe from every nobleman's horse that passes with his lord through the street, unless redeemed by a certain price of money. In token of this are several gilded shoes nailed on the castle gate, which seems to have been large and fair." A shoe was paid for by the Duke of York in 1788. Hone, in the Year Book, says: "According to Aristotle and Pliny, shoes of raw hides were put upon camels in war time, and during long journeys." Arrian mentions soles or shoes among the riding furniture of an ass. Xenophon relates that the Asiatics used socks to prevent their

horses sinking into the sands. The Greek word "selinaia," a horseshoe, first occurs in the ninth century, when it was only used in time of frost or upon special occasions. Nero's mules had shoes of gold or silver. Winckelman figures a gem with a man holding up the foot of a horse, and another showing it. Sir Richard Colt Hoare found halves of two shoes in a British barrow. Dr. Meyrick says: "The Normans first introduced the art of shoeing horses as at present practised in England;" yet there were dug up in Colney, in Norfolk, Roman urns, and a horseshoe of uncommon form, round and broad in front, running very much backward, and having its extreme ends almost brought close behind, and rather pointing upwards, with the nail holes still perfect. (Fosbroke's Ency. of Antiq.). There were superstitious beliefs and practices respecting horseshoes. Aubrey tells, that, in his time, "It is a thing very common to nail horseshoes on the thresholds of doors, which is to hinder the power of witches that enter into the house. Most houses of the west of London have the horseshoe on the threshold. It should be a horseshoe that one finds. In the Bermudas they used to put an iron into the fire when a witch comes in. Mars is enemy to Saturn." He adds: "Under the porch of Staninfield Church, in Suffolk, I saw a tile with a horseshoe upon it, placed there for this purpose, though one would imagine that holy water would alone have been sufficient. I am told there are many other similar instances." In 1797, Mr. Brand says: "In Monmouth Street, many horseshoes nailed to the thresholds are still to be seen. There is one at the corner of Little Queen Street, Holborn." April 26th, 1813, Mr. Ellis "counted no less than seventeen horseshoes in Monmouth Street nailed against the steps of doors."

In Gay's fable of "The Old Woman and her Cats," the supposed witch complains as follows:

Crowds of boys

Worry me with eternal noise;
 Straws laid across my face retard,
 The horseshoe nailed (each threshold's guard),
 The stunted broom the wenches hide,
 For fear that I should up and ride.

"That the horseshoe may never be pulled from your threshold" occurs among the good wishes introduced by Barton Holiday in his "Marriage of the Arts." Nailing of horseshoes seems to have been practised as well as to keep witches in, as to keep them out. Mr. Douce's manuscript notes upon his copy of Bourn's "Vulgar Errors" say: "The practice of nailing horseshoes to thresholds resembles that of driving nails into the walls of cottages among the Romans, which they believed to be an antidote against the plague; for this purpose L. Manlius, A. U. C. 390, was named Dictator, to drive the nail. See M. Lumisden's Remarks on the Antiquities of Rome, p. 148."

Misson says, in his travels in England: "Having often observed a horseshoe nailed to the threshold of a door (among the meaner sort of people), I asked several what was the reason of it; they gave me several different answers; but the most general was, that they were put there to keep out witches. It is true they laugh when they say this, but yet they do not laugh at it altogether; for they believe there is, or at least may be, some secret virtue concealed in it; and, if they were not of this opinion, they would not be so careful to nail it to their thresholds."

Handsel.—Misson, after remarking as above, upon horseshoes, says: "This little superstition puts me in mind of another. A woman that goes much to market told me, the other day, that the butcher-women of London, those that sell fowls, butter, eggs, &c., and in general most trades-people have a particular esteem for what they call *handsel*, that is to say, the first money they receive in the morning; they kiss it, spit upon it, and put it in a pocket by itself." Lemon explains "*handsel*" to be "the first money received at market, which many superstitious people will spit on, either to render it tenacious that it may remain with them, and not vanish away like a fairy gift, or else to render it propitious and lucky, that it may draw more money to it."

In relation to *Handsel*, J. F. Phoenix writes to the Year Book in 1831: "Brand, I find, has much on spitting and saliva, but the word '*handsel*,' is, in my

opinion, a handfull of such articles as could be so measured and valued by such; yet I find in Arnold's chronicle of the customs of London, quarto, page 191, the following curious item, which may have reference to the above custom: "*Another weight* is called *auncels* shaft, and this weight is forboden in England by statute of Parliament, and also Holy Church hath caused in England all those that bye and sell by that *auncel* weight, for it is a disuseable weight if a man cast him to deceive the people and for to be false."

Brownies.—Martin, in his description of the Shetland Isles, says: "It is not long since every family of any considerable substance in those islands was haunted by a spirit they called Brownie, which did several sorts of work; and this was the reason why they gave him offerings of the various products of the place. Thus some, when they charmed their milk or brewed, poured some milk and wort through the hole of a stone called Brownie's Stone. Brownie was frequently seen in all the most considerable families in these isles, and north of Scotland, in the shape of a tall man; but, within these twenty or thirty years past, he is seen but rarely. There were spirits, also, that appeared in the shape of women, horses, swine, cats, and some like fiery balls which would follow men in the fields; but there have been but few instances of these for forty years past. These spirits used to form sounds in the air resembling those of a harp, pipe, crowing of a cock, and the grinding of querns; and sometime they thrice heard voices in the air by night, singing Irish songs, the words of which songs some of my acquaintances still retain. One of them resembled the voice of a woman who had died sometime before, and the song related to her state in the other world." King James I, in his *Dæmonology*, says: "Brownie appeared like a rough man and haunted divers houses without doing any evil, but doing, as it were, necessarie turns up and downe the house; yet some were so blinded as to beleeeve that their house was all the sensier, as they called it, that such spirits resorted there."

Camden, in his "Ancient and Modern Manners of the Irish," says of Fairy

Sickness, "When any one happens to fall he springs up again, and, turning round three times to the right, digs the earth with a sword or knife, and takes up a turf, because, they say, the earth reflects his shadow to him (or they imagine there is a spirit in the earth); and, if he falls sick within two or three days after, a woman skilled in those matters is sent to the spot, and there says: "I call thee P. from the east, west, south and north, from the groves, woods, rivers, marshes, fairies white, red, black," &c.; and after uttering certain short prayers, she returns home to the sick person, to see whether it is the distemper they call *esane*, which they suppose inflicted by the fairies, and, whispering in his ear another short prayer, with the pater-noster, puts some burning coals into a cup of clear water, and forms a better judgment of the disorder than most physicians."

In a very scarce tract Moses Pitt relates that his female servant, "Anne Jeffries, (for that was her maiden name) was born in the parish of St. Teath, in the county of Cornwall, in December, 1626, and is still living, 1696, aged 70. She is married to one William Warren, formerly hired to the late Dr. Richard Lower, deceased, and now to Sir Andrew Glanning, of Devon, Bart., A. D. 1645, as she was one day sitting knitting in an arbour in the garden, there came over the hedge, of a sudden, six persons of a small statue, all clothed in green, which frightened her so much as to throw her into a great sickness. They continued their appearance to her, never less than two at a time nor ever more than eight, always in even numbers, two, four, six and eight. She forsook eating our victuals, and was fed by the fairies from the harvest time to the next Chirtmas, upon which day she came to the table and said because it was that day she would eat some roast beef with us, which she did, I myself being then at the table. One day she gave me a piece of her (fairy) bread, which I did eat, and think it was the most delicious bread that I ever did eat, either before or since." Moses Pitt again says: "On another day these fairies gave my sister Mary a silver cup, which held about a quart, bidding her give it my mother,

but my mother would not accept it. I presume this was the time my sister owns she saw the fairies. I confess to your lordship I never did see them. I have seen Anne in the orchard dancing among the trees, and she told me she was then dancing with the fairies."

The Devining Rod. Ezekiel mentions divination by the rod or wand.

Hosea reproaches the Jews as being infected with like superstition: "My people ask counsel at their stocks, and their staff declareth unto them." Chap. iv., 12. The Chaldeans, and almost every nation which practised divination, used rods in their performances. In Sheppard's Epigrams, 1651, we find:

VIRGULA DIVINA.

Some sorcerers do boast they have a rod,

Gather'd with vowes and sacrifice,
And (borne about) will strangely nod

To hidden treasure where it lies.

Mankind is [sure] that rod divine,
For to the wealthiest (ever) they incline.

The notion still [1838] prevails in England of the hazel's tendency to a vein of lead ore, a seam or stratum of coal, water, &c. In the "Living Library or Homencall Meditations," 1621, we read that "no man can tell why forked sticks of hazell (rather than sticks of other trees growing upon the very same places) are fit to show the places where veins of gold and silver are." [Hone].

Charms.—From the Year Book of December 28, 1838, we learn "that Sir Thomas Brown, in his "Quicunx Artificially Considered," mentions a rural charm against dodder, teller, and strangling weeds, by placing "a chalked tile at the four corners, and one in the middle of the field, which, though ridiculous in the intention, was rational in the contrivance, and a good way to diffuse the magic through all parts of the area." The three following rural charms occur in Heinck's *Hesperides*:

I.

This I'll tell ye by the way,
Maidens, when ye ravens lay,
Cross your don and your dispatch
Will be bettee for your batch.

2.

In the morning when ye rise,
Wash your hands and cleanse your eyes,
Next be sure ye have a care
To disperse the water farre
For as farre as that doth light,
So far keeps the evil spright.

3.

If ye fear to be affrighted,
When ye are (by chance) benighted:
In your pocket for a trust
Canny nothing but a crust:
For that holie piece of bread
Charmes the danger and the dread.

There is mention of older charms in Bale's interlude concerning the laws of Nature, Moses and Christ, 4to, 1562. Idolatry says:

With blessinges of Saynt Germaine
I will me so determyne

That neyther fox nor vermyne

Shall do my chyckens harme.

For your gese seke Saynt Legearde,
And for your ducks Saynt Leonarde,

There is no better charme.

Take me a napkin folte
With the byas of a bolte,
For the healing of a colte
No better thyng can be.
For lampes and for bottles,
Take me, Saynt Wilfrids Knottes,
And holy Saynt Thomas Lottes,
On my life I wanande ye.

And good Saynt Francis Gyrode,
With the hamlet of a hyrdle,

Are wholesome for the pyppe;

Besides these charms afore

I have feates many more

That kepe still in store,

When now I order hyppe.

Ady, by his "Candle in the Dark," 1655, helps us to another charm. He says an old woman in Essex came into the house at a time when as the maid was churning of butter, and having labored long and could not make her butter come, the old woman told the maid what was wont to be done when she was a maid, and also in her mother's young time, that if it happened their butter would not come readily, they used a charm to be said over it, whilst yet it was in beating, and it would come straightways, and that was this:

Come, butter, come,
Come, butter, come;
Peter stands at the gate,
Waiting for a butter'd cake;
Come, butter, come.

This, said the old woman, being said three times, will make your butter come, for it was taught my mother by a learned churchman in Queen Mary's days, when as churchmen had more cunning, and could teach people many a trick that our ministers nowadays know not.

Grose tells us a superstition, that "a slunk or abortive calf, buried in the highway over which cattle frequently pass, will greatly prevent that misfortune happening to cows." This is commonly practiced in Suffolk.

Lupton, in his third book of Notable Things, 1660, says: "Monsear, any manner of way administered to horses, brings this help unto them, that they cannot be hurt whiles the smith is shoeing of them therefore it is called of many, *herba clavorum*, the herb of nails "

Coles, in his Art of Simpling, says: "If a footman take mugwort and put it into his shoes in the morning, he may goe forty miles before noon, and not be weary." The same author, in his Adam in Eden, tells us: "It is said, yea, and believed by many, that *moonwort* will open the locks wherewith dwelling houses are made fast, if it be put into the key hole; as also that it will loosen the locks, fetters and shoes from horses' feet that goe in the places where it groweth; and of this opinion was Master Culpepper, who, though he railed against superstition in others, yet had enough of it himselfe, as may appear by his story of the Earle of Essex: his horses, which, being drawn up in a body, many of them lost their shoes upon White Downe, in Devonshire, near Tiverton, because moonwort grows upon heaths."

Rue was hung about the neck as an amulet against witchcraft in Aristotle's time. Shakespeare in Hamlet, has the passage: "There's rue for you, and here's some for me. We may call it herb of grace in Jundays," Rue was called herb of grace by the country people; probably for the reason assigned by Warburton, that it was used on Sundays by the Romanists in their Exer-

cisms. Charms and superstitions, preservatives against themselves, are frequently mentioned by old authors. In Greene's Penelope's Web, etc., 4to, 1601, we read: "He which weareth the hayleaf is privileged from the prejudice of thunder." And, in the old play of "The White Devil," Cornelia says:

"Reach the bays:
I'll tie a garland here about his head,
'Twill keep my key from lightning."

Also in "A Strange Metamorphosis of Man, transformed into a Wildnesse, deciphered in characters," 12mo, 1634; under the bay tree, it is observed, that it is "so privileged by nature, that even thunder and lightning are here even taxed of impartiality, and will not touch him for respect's sake as a sacred thing." Again, cited from some old English poet in Bodenham's Belvedere in the Garden of the Muses," 8vo, 1600. we read:

"As thunder nor fierce lightning harms the bay
So no extremities hath power in fame."

Martin, in his description of the Western Islands, says: "It is a received opinion in these islands, as well as in the neighboring part of the mainland, that women, by a charm, or some other secret way, are able to convey the increase of their neighbor's cow's milk to their own use; and that the milk so charmed doth not produce the ordinary quantity of butter; and the curds made of that milk are so tough that it cannot be made so firm as the other cheese and also is much lighter in weight. The butter so taken away and joined to the charmer's butter, is evidently discernible by a mark of separation, viz.: the diversity of colors; that which is charmed being paler than the other. If butter having these marks be found on a suspected woman, she is presently said to be guilty. To recover this loss they take a little of the rennet from all the suspected persons and put it into an egg-shell full of milk, and when that from the churner is mingled with it it presently curdles, and not before. Some women make use of the root of groundsel as an amulet, against such charms, by putting it among the cream."

From an old book, as curious as it is rare and valuable, "The Magick of Kirani, King of Persia and of Harpociation,"

printed in the year 1685, we extract as follows: "A swallow which, in the spring, raises all people by singing; and it has such actions as these: if any one take its young ones and put them in a pot, and when it is heated up, bake them, then, opening the pot, if he considers, he will find two young ones kissing one another; and two turning one from the other. If therefore you take those two that kiss one another, and dissolve them in oil of roses, or give the ashes to drink, it is a love potion; but you may dissolve this, if you give a little of the ashes of those that turn one from another, in ointment or drink. If any one cut out the tongue of a goose alive, and lay it upon the breast of a man or a woman asleep they will confess all that ever they have done—for love between man and his wife: If a man carry the heart of a male crow, and the woman the heart of a female, they will agree between themselves all their lifetime; and this miracle is certain—To open locks, doors, bolts, and to tame wild beasts, and to be beloved of all, and to acquire all things, that whatever you please may be done for you: If you stop the hole of a tree, in which the young ones of a woodpecker are, he shall carry the herb which he knows, and, touching it, it opens; for, if it be made of clay or chalk, the dirt will fall; if of stone, it bursts; if a wooden board or an iron plate be so fastened with nails, all things cleave and break in pieces, upon the touch of the herb, and the woodpecker opens and takes out her young ones. If, therefore any man engrave a woodpecker on the stone dendrites, and a sea-dragon under its feet, and enclose the herb underneath it which the woodpecker found and carried, every gate will open to him and bolts and locks; savage beasts will also obey him and come to tameness; he shall also be beloved and observed of all, and whatsoever he hath a mind to he shall acquire and perform. Thus far nature; but he that carries it shall learn those things that are in the gods; shall open locks and loose chains, shall pacify all wild beasts by the will which is in heaven, shall assuage the waves of the terrible sea, shall chase away all devils, and shall appear good to all men."

TREATMENT OF HIP-JOINT DISEASE.

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(A Paper read before the Baltimore Medical and Surgical Society.)

It is not within the scope or object of the present paper to discuss the whole pathology and treatment of hip-joint disease. Experience has convinced me that nothing more certainly destroys the aim one has in view when he brings any subject under the notice of a medical society, than extending too widely the field of his observations. By such a course discussion is paralysed for want of concentration, and frequently the special objects of the author are lost sight of in the attempt to analyse the whole subject. I will therefore at once state that the object of the present communication is to bring under the notice of this society the views I entertain as to the principles of treatment to be adopted in the ordinary form of Hip-Joint Disease as we generally find it occurring in children, mostly from five to ten years of age, but sometimes beyond this period.

The first point in the pathology of this disease, and one which materially influences our treatment in all its stages is the fact, that children suffering from this affection usually exhibit unmistakable signs of the strumous diathesis, and the disease is therefore correctly regarded as belonging to the class of strumous affections. Not that this necessarily involves the idea that Hip-Joint Disease is essentially a constitutional affection, but the observation goes to prove that although the disease may be of local origin, commencing, as I believe it frequently does, in a slight accident or sprain, such as would injure the ligaments of the joint, and excite local inflammation, the subsequent progress of the affection, and its tendency to terminate in the destructive processes of ulcera-

tion and suppuration, are essentially determined by the strumous constitutional condition of the patient. I assume that a similar injury in a child of a sound constitution would not be followed by destructive disease, and that the constitutional condition of the patient therefore determines the progress of the inflammation excited by the injury, and impresses a definite character upon the affection.

The *pathology* of Hip-Joint Disease, more especially in reference to the structure in which the morbid process commences, *i. e.*, whether in the synovial membrane, the round ligament, the articular cartilage, or the bone, remains, even in the present advanced stage of pathological knowledge, a problem yet to be solved; obviously for the reason, that patients never die from the effects of this disease in the early stage, or when the morbid process is limited to the structure in which it commences, but, on the contrary, when death occurs as the result of the disease, all the structures entering into the composition of the joint are more or less extensively destroyed. The most generally received idea, probably, has been that chronic inflammation commences in the cancellous structure of bone, and extends to the articular cartilage, as Sir B. Brodie described it to occur in the scrofulous affections of the joints generally. Of this, however, we have no proof; and, as it is not my intention to discuss the pathology of the subject, we will not enter upon these questions.

Cases in which death occurs from some other disease, whilst the Hip-Joint affection is yet in an early stage, must not unfrequently occur, when we consider that the first stage of the joint disease, *i. e.*, previous to the formation of abscess, frequently lasts one year and sometimes as long as two, or even three; but in such cases medical men are content to ascertain the immediate cause of death without

examining the condition of the hip-joint. Very few post-mortem examinations, therefore, of Hip-Joint Disease in the early stage have been recorded. The late Mr. Aston Key, of London, recorded the appearances observed in one case, and concluded that the round ligament was the primary seat of the chronic inflammatory changes, which extend from this structure to inflammation of the synovial membrane, ulceration of the articular cartilages, and caries of the bone. In several dissections which I had the opportunity of making, I found appearances agreeing with those described by Key. Also in the first volume of the translation of Chelius' Surgery identical changes are mentioned. Moreover, I am disposed to believe, that chronic inflammatory changes most frequently commence in the round ligament as the result of an accident, in which the round ligament may be violently strained or partly torn, and that from this spot, as a centre, the disease extends to the rest of the synovial membrane, the articular cartilage, and at a later period to the bone.

In the Medico-Chirurgical Transactions of London, vol. xiii, Mr. Coulson records three cases in which he examined the hip-joint in the first stage of the disease, and in each case the round ligament with its investing synovial membrane was found to be the seat of inflammation, without the other structures being materially implicated.

That Hip Joint Disease does commence in the way above described is a fact proved by dissection of cases recorded by Aston Key, Coulson and others; and the curability of the disease, or its arrest in an early stage without the complete destruction of the joint confirms this view, and is opposed to the supposition of the cancellous tissue of the bone being the primary seat of the disease.

As a more rare and exceptional

event, it is probable that the disease commences in the cancellous tissue of the head or neck of the thigh-bone, or of the bones forming the acetabulum. In this case the inflammation would more certainly terminate in necrosis and caries of the bone with abscess, as we see it occur in some cases of hip-joint disease at a comparatively early stage of the affection.

These cases must either be regarded as examples of primary bone disease, or as cases in which the disease rapidly extends to and involves the bone subsequently to the soft tissues, in patients of a marked strumous constitution. Whatever may be the exact mode of origin, they undoubtedly form the most serious examples of hip joint disease met with in practice, and frequently call for surgical interference either by excision of the head of the bone or free incision and gouging. These are cases, also, which we occasionally, though happily very rarely, see terminate in a fatal result.

With regard to the hip-joint disease, the plan which I have always adopted and which will, I believe, be found most useful for practical purposes, is that of dividing the disease, so to speak, into three stages:

The *first stage*, extending from the commencement of the symptoms to the formation of abscess. The *second stage*, extending from the formation of abscess to the bursting or opening of the same. The *third stage*, extending from the bursting of the abscess to the complete destruction of the joint, with disease of the bone, dislocation, etc.

It is unnecessary for me to enter here into any description of the symptoms characteristic of the different stages; but I will at once proceed to the subject I am desirous of bringing under the notice of the members of the society this evening, viz: *What should be the leading principles of our treatment of Hip-joint Disease, more especially in the first stage, in which alone we can hope to obtain a cure?*

In the early part of the first stage, when as a general rule, the local symptoms are in abeyance, and there is no pain at all complained of in the hip-joint, or at most a little pain on sudden movement, or after more than usual exercise, there is little room for difference of opinion; and surgeons generally are agreed that rest alone, or in combination with tonics, and change of air to improve the health are sufficient. Some surgeons, however, would at once insist upon absolute and long-continued rest, *i. e.* for several months, with the application of the straight splint or starch bandage. Other surgeons are content to order rest for a few weeks on the crutch, with the application of the straight splint; and this plan I have generally adopted, allowing the patients afterwards to walk about with a pair of crutches when they are old enough to use them, and having a large gutta-percha splint applied to the hips. Even in this incipient stage of the disease, many surgeons still resort to blisters; but I rarely employ counter-irritation in any form at this period.

Warmth and moisture, by means of a large piece of spongio-piline dipped in hot water and applied over the joints, I have found useful as well as grateful to the patient.

It is only when the disease is a little more advanced, and pain in the hips becomes more frequent and more decided, that room exists for the greatest difference of opinion as to the treatment to be adopted. As to the more certain means to be adopted in detection of the disease in its very earliest stage, when the symptoms are vague and obscure: Pain is felt either permanently or at times in the knee joint or vicinity, which is often taken as characteristic of disease there, such as rheumatism, neuralgia, etc. It may be fairly and unquestionably set down that after firm pressure upon the knee joint and its deeper tissues and sur-

roundings, if there is no increase, that this pain is solely indicative of commencing and perhaps obscure disease in the hip; for in nine cases out of ten in the early stage no pain or uneasiness is felt in the hip-joint, but all malaise and pain will be located about the knee-joint. This pain is only sympathetic, as following the rule of nature—irritate the trunk of a nerve or let the nerve be affected in its course, the pain or sensation is felt at its termination. Hence, from a knowledge of this occurrence, every surgeon after a successful examination of the knee, although from personal observation and experience he might reach the seat of trouble instantly, should direct his attention to the region of the hip; and it might be stated that even after manipulation there, such as pressure made deeply with the finger tips, no pain or uneasiness will be elicited. And why? Simply because the disease in its incipency, as before stated, is not superficial in the capsular ligaments and other envelopes of the joint but deeply seated either in the ligamentum teres or articular cartilages of the bones forming the joint. After the closest manipulation and strictest examination of the hip region has failed to produce pain, there only remains one procedure to clear up the obscurity, which, in ninety-nine cases out of a hundred, I have never found to fail in locating accurately the trouble, i. e., bend the leg upon the thigh, steadying the limb with one hand and with the palm of the other give the bent knee a quick, sharp and forcible blow, which will drive the head of the femur well into the cavity of the acetabulum upon the diseased ligament and surrounding parts, when the older patients will tell you there is intense pain and the younger will wince considerably and cry out. In my hands this latter manifestation has seldom or never failed to locate accurately and beyond dispute the seat of trouble.

The question, then, may be asked: Are we to apply our remedies constitutionally and locally with the view of subduing a deep-seated inflammation of an active character? Are we, with this view, to apply leeches, blisters, moxa, issues and actual cautery externally, and calomel, &c., internally, and to enforce lying down as a means of securing absolute rest to the joint? Or, on the other hand, are we to regard the inflammation of the joint as essentially of a passive character depending for its continuance upon a condition of constitutional debility, or scrofulous diathesis? And, with this view, are we to reject all antiphlogistic treatment, both externally and internally, and direct our undivided efforts to the means of improving the constitutional powers of the patient, relying at the same time upon absolute rest to the joint as the only local treatment?

As a choice between these broad principles of treatment, I unhesitatingly give preference to the latter, and believe that modern pathology and clinical observations are fast driving practice in the direction which they indicate. The days of antiphlogistic treatment for hip-joint disease are rapidly passing away; but, in a modified form, this principle of treatment is still followed out by many surgeons. Leeches are rarely applied freely in the first stage, but some surgeons frequently repeat, i. e., at intervals of a few days, the application of one or two leeches. Moxa and issues are still employed by some surgeons in England, and still more frequently on the continent; and repeated blistering is still a common mode of practice. Internally, calomel, in alterative doses, combined with wine and tonics, is at the present time a very general practice, and recommended in all modern surgical works.

(To be Continued.)

REMEDIAL LESIONS OF THE HEART.

BY J. W. CHAMBERS, M. D.,

Demonstrator of Anatomy, College of Physicians and Surgeons.

(Read before the Medical and Surgical Society of Baltimore).

A clear, logical and scientific definition of what I mean, when I employ the term "Remedial Lesions of the Heart," is a desideratum of the highest importance, from the fact that it is impossible to engage in any profitable discussion until all the misconceptions by which the term may become encumbered have been cleared away. What I mean, and propose to discuss under this heading, is those lesions of the heart which are due and are secondary to an anæmic condition of the blood, and which yield readily to therapeutic remedies. With these prefatory remarks I shall enter upon the consideration of the above subject.

That murmurs, regurgitant in character, and audible over any part of the cardiac area occur independently of any irremediable mechanical lesion of the organ, is a fact confirmed by our every day clinical experience. But as hæmic murmurs, which occur mostly, if not always, at the base of the heart, have been regarded by most authors as due to an abnormal condition of the blood and not to any change in the circulatory apparatus, I will leave them entirely out of the discussion, taking up those murmurs due only to the change in the heart itself. All murmurs of the heart, save hæmic and intra-ventricular, are chargeable to the anatomical changes in the valves or the orifices which they cover.

Admitting the truthfulness of this proposition, that we may have valvular regurgitation is unquestionable when ever there is an anæmic condition of the blood of sufficient intensity and duration, however that may be brought about. Anæmia, as we all know, from whatever cause, produces

an enfeebled, relaxed and flabby condition of all muscular tissue, voluntary as well as involuntary, both of whose sources of nutrition are the same. In these conditions the heart necessarily participates, and we are not, therefore, surprised to learn that in long continued fevers it sometimes becomes as limp as wet paper (Stokes) nor that in chlorosis it is found to be considerably dilated. In fact, a number of authorities have attributed dilatation to an anæmic condition of the blood (Bamberger, Stork).

It has also been proven by experiments on dogs and rabbits that repeated venesections were invariably accompanied by a dilated condition of the heart. Dilatation of the heart, however, as has been pointed out by Bristowe and others, is a very frequent cause of systolic apex murmur. Now then, it is plain that the accompanying dilatation of chlorosis, or any other extreme spanæmic condition of the blood, may be and often is accompanied by a relative inadequacy of the different valves, and thus regurgitation is heard at the auriculo-ventricular openings. In fine, some authors go so far as to state that the true hæmic basic murmur is due to tricuspid regurgitation, but this I seriously doubt, from the fact that these valves are found much less affected than any others of the heart, while the basic murmur is quite common.

It is of consequence to remember that all cases of dilatation due to an anæmic condition of the blood are not active, in which case it would be rather a sign of increased than diminished power of the ventricles; but that it is often passive, the gradual result of residual accumulation in the cavity of a hollow muscle which is too weak to fully discharge its contents. Let it be remembered that regurgitation due to insufficiency of the valves, caused by the extreme dilatation of the heart, differs in its results in no respect from regurgitation due to irremediable or,

ganic disease, but equally with the latter is always followed by pulmonary congestion and its consequences as well as by all usual consecutive results attending the obstruction of the left side of the heart, and cannot be distinguished from irremediable organic lesion save from the history and proof that is afforded by time.

Bearing all of the facts in mind, we are tempted to inquire how it is that a hæmic murmur in a given case of extreme spanæmia, as chlorosis for example, becomes in its latter stages an apex murmur of regurgitation, which was in its earlier stages a basic murmur, apparently of obstruction. To the query there is, I think, but one reply, and that is that, all through, the murmur is due to ventricular dilatation, and the changes in its maximum intensity are due to alterations in the heart itself. I am quite aware that alterations as to the position and textural condition of the media overlying and surrounding the heart bring about many remarkable changes, both in regard to the production and the propagation of sounds; into these, however, it is at present unnecessary to enter.

In chlorosis the prime evil, so far as the heart is concerned, is unquestionably an anæmic condition of the blood. In this state the great defect is in the diminution of the corpuscular elements, the serum remaining more or less near the normal,—occasionally a slight increase in the amount, though never diminished. Now and then its constituents may be slightly altered.

Thus, even when at rest, the heart has as much work to do as usual, and sometimes it has more, while it is much less able to do it; and whenever any exertion is made, the breathlessness due to the state of the blood necessarily calls upon the heart for more than usual effort, which it is less than usually able to exert.

The result of this is easily foreseen; residual accumulation commences and

gradually increases in the left ventricle, for it is there that the strain primarily falls, and it is the left ventricle which suffers first and most in this and similar cases, as is plainly and clearly seen. In a very short time the dilatation increases to such an extent that a relative inadequacy of the mitral valve is established and regurgitation is set up. We must not forget, during all of this time, that a similar process of congestion from residual accumulation has been gradually going on in the left auricle, first of all, next in the lungs and then in the right ventricle, terminating, of course, in the systemic venous system, where all such processes must naturally end. This process is essentially slow and gradual, but it is constant, and proceeds along with the changes in the left heart, being probably delayed by the distensibility of the pulmonary blood vessels. It is important to bear in mind that, in accordance with a well-known pathological law, some degree of hypertrophy is set up, probably, in every case; but this must necessarily be imperfect and must lag much behind the tendency to dilation.

It is obvious, therefore, that all cases of extreme and long-continued anæmia, from whatever cause, may be attended with regurgitation of either cardiac orifice, due to extreme dilatation of the heart and the consequent inadequacy of the valve, independent of any irremediable organic lesion of the organ.

COLLEGE OF PHYSICIANS AND SURGEONS, BALTIMORE.—The vacancy in the Faculty, created by the death of Professor E. Lloyd Howard, has been filled by the transference of his duties to Professor Richard Gundry, the title of whose chair now is, "*materia medica, therapeutics and mental diseases.*"

SOCIETY REPORTS.

MEETING OF THE PENNSYLVANIA AND MARYLAND UNION MEDICAL ASSOCIATION.

REPORTED BY W. STUMP FORWOOD, M. D.,
OF DARLINGTON, MD.

The fourth annual reunion of the *Pennsylvania and Maryland Medical Association*, which had long been looked forward to, by many, with the most pleasant anticipations, was held on the excursion steamboat *Chester*, of Baltimore, from Port Deposit, Md., on Thursday, August 25, 1881, and was by far the largest and most enthusiastic meeting that has occurred in the history of the association.

This being the first meeting held in Maryland, large accessions were made to the membership from the profession of this State; and the association was also honored by the inspiring presence of a goodly number of Maryland ladies, who, in conjunction with the ladies from Pennsylvania, contributed a large proportion of the pleasure enjoyed on this interesting occasion.

The hour fixed for the boat to start on its voyage down the bay was 10 o'clock A. M.; but, in consequence of some delay of the Columbia and Port Deposit Railroad train, by which the great body of the Pennsylvania members were to arrive, her departure was delayed until sometime after 11 o'clock.

The meeting between the members from the different sections, as they assembled on the steamer, the majority of whom had not taken each other by the hand since the last annual reunion on the *Conestoga*, near Lancaster City, was cordial in the extreme. The smiling countenances and warm greeting that invariably marked the recognition of those who had met before, was the best possible evidence of the complete success achieved in the objects for which the association was especially organized.

After quitting her moorings at Port Deposit, the *Chester* steamed grandly down toward the head of the bay. The novelty to many of those from the highlands of Pennsylvania was exceedingly pleasing, and as they stood upon

the upper deck, and rapturously gazed over the smooth and bright waters, and again over the green hills of Harford County, on the one side, and upon the bold *Mount Ararat*, on the Cecil County side, many poetic thoughts and happy reflections doubtless flitted through the minds of each and every one. The magnificent iron bridge of the Philadelphia, Wilmington and Baltimore Railroad which spans the river at Havre de Grace, next arrested the attention of the passenger; and, as we approached it, the great drawer majestically swung open by magic springs as if conscious of the passage of the largest number of distinguished professional men, and their fair patrons, that had ever passed its portals at one time.

The boat stopped at Havre de Grace to take aboard the physicians of that city as well as those that were expected from Baltimore. Eighteen or twenty professional men had been invited from the latter city, but it appears that Dr. John Morris (a host in himself,) his wife and Mr. Hancock, the well known manufacturer of fine pharmaceuticals, were the only representatives from the monumental city.

The "city of brotherly love," however, although more distant from the place of meeting, furnished a larger representation than that from Baltimore. Among those observed as present from Philadelphia, we are enabled to name Dr. Laurence Turnbull, the eminent and widely known aural surgeon; Dr. Charles K. Mills, Lecturer on Mental Diseases, etc., in the University of Pennsylvania; Dr. B. F. Baer, Demonstrator of Gynecology, etc., in the same institution, and Col. A. Boyd, a well known business man and highly esteemed citizen of Philadelphia, who was accompanied by his two accomplished and agreeable daughters. These additions to the reunion, from the cities named, afforded exceedingly pleasant zest and variety.

After a time had been devoted to the meeting of old friends, and to the introduction of new ones, the President of the association, Dr. Jacob Price, of West Chester, Pa., called the members to order for the transaction of preliminary business, the calling of the roll, the registra-

tion of new members, the reading of the minutes of the previous meeting, &c. These duties were performed by the Secretary, Dr. S. J. Rouse, of York, Pa., who has acceptably filled the office, continuously, from the origin of the organization.

The Secretary read letters of regret, for non-attendance from Dr. A. F. Erich, of the *College of Physicians and Surgeons*, Baltimore; from Dr. Wm. B. Atkinson, *Permanent Secretary of the American Medical Association*, etc., etc., Philadelphia, and from Dr. D. G. Brinton, *Editor of the Medical and Surgical Reporter*, Philadelphia.

The number in attendance upon the steamboat was estimated at from 450 to 500. The ladies and the gentlemen guests outside of the profession constituted by far the *largest half*. While Pennsylvania was represented from ten or more counties, the great body of those present were residents of Lancaster and York counties. Cecil and Harford counties, and the few named from Baltimore, furnished the Maryland delegation.

After the dispatch of the preliminary business, which occupied solely the attention of the "professionals," an announcement was made which immediately excited the deepest interest of *all*. We refer to the *dinner*. This important feature of the day's enjoyment having been completed, the President called the meeting again to order, in accordance with the programme, for the delivery of the President's annual *address*, and for the rendering of the sentiments, or "toasts," which had been assigned to a number of the members. As it was impossible for any one part of the boat to accommodate one-half of the passengers sufficiently to hear the remarks to be made, a considerable number assembled in another part of the steamer and joined in the dance, the charming music for which was furnished by Keffer's celebrated cotillion band from Lancaster City.

Upon the restoration of "order" the president, Dr. Price, arose and proceeded to deliver his address. He began by saying that he had labored under some embarrassment in selecting a subject appropriate to the occasion. "This,"

said he, "is a festive day. To-day we are not doctors. Busy care is to be laid aside; the routine of anxious duty is broken; the wrestling with the dread issues of life and death, that marks our daily work, is to cease; the responsibilities that prematurely furrow the cheek and bend the step of the care-worn physician are not to enter here * * *

Social enjoyment, the renewal of life, health and pleasure, and the extension of professional acquaintance and brotherhood, is our duty now. The occasion seems to call for sallies of wit, the play of humor and the racy anecdote; yet, I know not why, sober thoughts have pressed upon me."

The president then proceeds to say that, although he has only been thirty years in the profession, he sees about him many vacant places in the brotherhood which were nobly filled when he began his journey, and among those who entered the race after him.

Among the respected brothers mentioned, who have unhappily fallen by the way, were Drs Patrick and Alexander M. Cassidy, Francis S Burroughs, H. E. Muhlenberg and G. B. Kerfoot, of Lancaster; and Dr. Richard E. Cochran, S. Clarkson and A. Clarkson Smith, of Columbia. He also referred to the late Dr. Washington L. Atlee, "whose great skill, indomitable courage and perseverance, did more, perhaps, than the labors of all others to place *ovariotomy* upon the list of justifiable operations; which through all time will be the means of rescuing many women from a slow and most suffering death."

He also referred to the loss, through death, of several distinguished physicians from Dauphin county, Adams county, Cumberland county and Chester county, Pa. He confessed that his personal knowledge of the Maryland physicians was quite limited, but kindly mentioned one lately deceased brother, for whom our hearts still bleed, and whose memory we shall never cease to cherish with loving regard while life shall last—our dear friend *Dr. John Evans*—who belonged equally to Cecil and Harford counties. The following is the language of the President in this connection:

"From Maryland two names have

been given me: Dr. John Evans, of Cecil county, who was eminent as a surgeon, and a great favorite with his professional brethren, and Dr. John Archer [of Harford county], who was the author of some valuable papers, one of which is referred to in Makenzie's work on *Diseases of the Throat*. Dr. Archer received the first medical diploma ever conferred in America." [University of Pennsylvania, 1768. F.]

The two physicians mentioned were both practitioners of great eminence in their respective days, but they lived nearly a century apart. They both have left their impress in medicine and surgery, that will be felt for a century to come. Dr. Evans resided in Havre de Grace, Harford county, Md., for many years, where he was greatly beloved for his personal worth, and universally regarded as the most eminent surgeon in the State, if we except Professor N. R. Smith, of Baltimore. In the latter years of his life, which were barely prolonged to about sixty, he returned to his native county, Cecil, and finally expired in the old family mansion in which he was born, on the 13th of June, 1878, respected and beloved by all classes of people within the wide range of his acquaintanceship,

In concluding this part of his subject,—his reference to the distinguished members who had fulfilled their mission and laid down their own lives, in some cases, in their efforts at prolonging those of others,—the President dwelt particularly, and evidently with deep feeling, upon the untimely death of his young, but brilliant colleague, Dr. John S. Parry, of Philadelphia. Dr. Parry was born in Dunmore township, Lancaster county, Pa., in 1844. He studied medicine with Dr. J. M. Deaver, the present President of the *Lancaster Co. Medical Society*, who was also present at this meeting. He graduated at the University of Pennsylvania in 1865. He paid a glowing tribute to the rare moral worth and extraordinary professional acquirements and success attained within his brief career. "In the ten years that spanned his professional life," said Dr. Price, "though much of the time in feeble health, he accomplished an amount of work that is seldom reached in a long life. He published no less than thirty-one papers on medical subjects;

some of them unsettled problems that had engaged the attention of the most able observers. Dr. Parry's contributions were so extensive and valuable as to attract the notice of the most learned, and gave to the youthful author a world-wide celebrity. Indeed, I am safe in asserting that no other American physician at the age of thirty-three (Dr. Parry's age at death) has gained such a distinguished reputation as has been won by the honest sturdy work of our poor Lancaster county orphan boy—the son of toil, but the worthy child of a heroic Christian mother."

Dr. Price added: "young Parry's life was a lesson of instruction and, perhaps, of reproof. Those of us who are upon the 'home-stretch' of life must feel the latter, that with lengthened years and vigorous health *we* have done so little, whilst *he*, with broken health, and death overtaking him at the threshold, did so much."

At the conclusion of the President's address, Dr. John L. Atlee moved that the thanks of the association be extended to the retiring President; which motion was unanimously carried.

Following the President's address, several gentlemen, who had been announced upon the programme to deliver remarks upon various subjects, then appeared, in turn, before the association in the order to be named, viz:

Dr. W. W. Virdin, of Lapidum, Harford co., Md., in a few well chosen and appropriately applied words, extended a very graceful and hearty "*Welcome to All*." He was followed by *Dr. R. E. Bromwell*, of Port Deposit, Md., whose pleasant duty it was to extend words of kindness and good-will to "*Our Guests*," and the duty was performed in such a frank and earnest manner as to leave no room for doubt upon the minds of his hearers as to the good faith and sincerity of the speaker's heart-felt expressions.

Next was introduced the senior, and one of the most universally esteemed physicians of Columbia, the genial *Dr. D. I. Brunner*, a gentleman who has uniformly taken the deepest and most active interest in the advancement of this association. He was very fittingly assigned the duty of delivering some remarks upon the history and the aims

of "*Our Association*," which was done in pleasant language, and to the gratification of his auditors, as was evinced by their hearty applause.

The sentiment that followed in order was "*Maryland to Pennsylvania*," and it was responded to by *Dr. W. Stump Forwood*, of Darlington, Harford county, Md. After referring to the widely known hospitality of the people of Maryland, a virtue for which they, in common with the citizens of other Southern States, have been found from the organization of the State in its colonial days to the present time, he spoke of this occasion as marking the first meeting of the joint State association within the borders of Maryland, a circumstance which justly inspired a proper sense of pride on our part, as we were in the minority of numbers, and then proceeded to say:

"The greater part of the waters of the noble bay upon whose bosom we are floating, although now within the limits of Maryland, spring and flow from a thousand hills and vales in Pennsylvania; in like manner does the major part of this association—the learned men and the fair ladies—this day in the land of *Mary*, come to us from the land of *Penn*. We welcome you as the Chesapeake welcomes its fountains of supply from which it derives its importance and grandeur. And may this event—this fraternal professional union of the two States—serve to unite our hearts in sympathy, like the mingling of the waters in the Chesapeake, as in the 'vale of Avoca,' so happily expressed by the poet:

'Where the storms that we feel in this cold world shall cease,
And our hearts, like thy waters, be mingled in peace!'"

After referring to the chief object of the organization, as being designed for the promotion of *social interests* and the promotion of those feelings of friendship which can only flow from the personal acquaintance and knowledge of worth, *Dr. Forwood* concluded Maryland's greeting to Pennsylvania in the following words: "For a large share of the pleasure derived from these meetings we are especially indebted to the *ladies*; and in extending to them, in conclusion our heartiest welcome, we must be permitted again to borrow the language of the poet:

'Oh woman! whose form and whose soul,
Are the spe'l and the light of each path we pursue!
Whether sunn'd at the tropics or chill'd at the pole,
If woman be there, there is happiness too!'"

This greeting was ably replied to on behalf of Pennsylvania by *Dr. S. B. Kieffer*, of Carlisle, Pa., whose sentiment possessed the corresponding title: "*Pennsylvania to Maryland*." He referred to the intimate and most kindly relations existing between the citizens of the two States, in the Revolutionary War in particular, but really ever since the colonial settlements in the days of Penn and Mary. *Dr. Kieffer's* sentiments for Maryland were extremely kind and cordial, and well befitting the character, life and work of the great progenitor of his truly "Keystone State."

We much regret that we have no notes of his remarks, nor, indeed, of the remarks made by any of the speakers, except those of the President, and our own, and are hence unable to record the exact words, which in every instance appeared to apply most justly and effectively to the sentiment.

The subject for the remarks of the succeeding speaker was seemingly foreign to any connection with the occasion, or with the profession, except as a rather far-fetched "incidental." It was entitled "*Benefits of Railroads*;" and was placed upon the programme for discussion by our genial and active co-laborer, *Dr. H. L. Orth*, of Harrisburg. Unfortunately for our desire for enlightenment in the particular application of this sentiment, in reference to these indispensable aids to modern civilization. *Dr. Orth* proved to be absent from the meeting, and thus left the subject altogether to the imagination. This was the only *hiatus* in the day's programme.

Dr. J. Willis Houston, of Chester, co., Pa., now delivered some excellent and highly appropriate views upon "*Education of all Classes*." *Dr. Houston's* remarks were evidently the result of much reflection, and of a deep interest in the subject of general education; and were pronounced in his usual fine style of elocution, which we have already had occasion to compliment and commend in our previous reports, as a rare talent with

our *non-speaking* profession, in the oratorical sense.

The programme was appropriately concluded by *Dr. W. S. Roland*, one of the leading medical men of York, Pa., both as regards seniority and professional reputation, who spoke the "*Farewell*."

At the conclusion of the speaking Dr. Atlee called for some volunteer remarks from the only medical representative of Baltimore, *Dr. John Morris*, which was seconded, and vociferous calls were made, when it was discovered that Dr. Morris had left the boat at Havre de Grace; and thus the kind feelings and good intentions manifested for Baltimore, and for her able representative, were unexpectedly frustrated.

The President appointed a committee of one member from each country represented, for the nomination of officers of the association for the ensuing year, as follows: *Dr. J. A. Ehler*, Lancaster City; *Dr. W. S. Roland*, of York; *Dr. W. W. Virdin*, Harford County, Md.; *Dr. S. B. Kieffer*, of Cumberland Co., Pa.; *Dr. V. B. Lilly*, of Adams Co., Pa.; *Dr. D. F. Unger*, of Franklin Co., Pa.; *Dr. E. V. Swing*, of Lancaster Co., Pa.; *Dr. R. H. Milner*, of Delaware Co., Pa.; *Dr. R. E. Bromwell*, of Cecil Co., Md.; *Dr. H. O. Witman*, of Dauphin Co., Pa.; and *Dr. L. De B. Kuhn*, (who was not present at the meeting) of Becks Co., Pa.

After a brief consultation this committee reported the following nominations:

For President.—*Dr. W. Stump Forwood*, of Darlington, Md.

Vice-Presidents.—*Dr. W. S. Roland*, of York, and *Dr. S. B. Kieffer*, of Carlisle, Pa.

Secretary and Treasurer.—*Dr. S. J. Rouse*, of York, Pa.

On motion, the nominees were elected by acclamation. The committee, having finished their duties were then discharged.

The report of the Treasurer was read, accepted and ordered to be filed.

Dr. John L. Atlee was called upon for a written copy of his extempore remarks, made before the association two years ago, at *McCall's*, entitled "*Our Sins*," which, by a resolution offered by *Dr. Forwood*, and adopted at the last meeting, he was respectfully requested to furnish for publication.

Dr. Atlee replied that the Secretary had not given him official notice of the resolution, and asked further time in which to prepare the said remarks, and promised to have them ready for presentation to the next meeting.

The business of the day being about concluded, and as the steamer was fast approaching the wharf at Port Deposit, (about 4 o'clock P. M., after nearly a five hours' trip, extending about twenty miles down the bay,) where all were soon to separate, and depart their several ways, the President, *Dr. Price*, called upon the newly-elected President, *Dr. Forwood*, to take the seat that he now vacated. *Dr. Forwood* stepped to the front and expressed his thanks to the association for the distinguished honor conferred upon him; an honor wholly unexpected and unsought, and therefore the more to be prized as the spontaneous expression of the fellow-members of his much-loved profession. He would strive to the best of his ability to maintain the dignity of the office which had been filled by such distinguished predecessors.

The only official act devolving upon the newly-elected President before the adjournment was the appointment of the Executive Committee for the coming year. He appointed the following named gentlemen to represent the association in that Committee:

Dr. J. Francis Dunlap, Lancaster Co., Pa.; *Dr. W. Compton*, Lancaster City; *Dr. Alex. Craig*, Columbia, Pa.; *Dr. John Montgomery*, Franklin Co., Pa.; *Dr. J. W. Kerr*, York, Pa.; *Dr. A. A. Hanna*, Port Deposit, Md.; *Dr. W. W. Virdin*, Harford Co., Md.*

Dr. Jackson, of West Chester, Pa., offered the following resolution, which was adopted unanimously:

"*Resolved*, That the thanks of the association are hereby tendered to all those who provided our excellent entertainment; and especially to *Mrs. Dr. Bromwell* and *Mrs. Dr. Hanna*, of Port Deposit, and to *Mrs. Dr. Virdin*, of Lapidum, Harford Co., Md."

The compliment was well merited by the ladies named, for their indefatigable

* The committee had not time to make their report as to the place for the next meeting, before the adjournment.

efforts in promoting the pleasure, and contributing to the success of the meeting, and the adoption of the resolution was accompanied with much applause.

Upon a motion, the meeting was then declared adjourned; and with many hasty but warm and regretful "good-byes," and expressions of gratification for the day's enjoyment, and of hopes for "many happy returns," the fourth annual reunion of the "*Pennsylvania and Maryland Union Medical Association*" dissolved, and all betook their various journeys homeward, *happier*, and, we trust, *better* men and women.

EDITORIAL.

"His life was gentle; and the elements
So mixed in him that nature might stand up
And say to all the world, *this was a man.*"

THE AGONY OVER.—President Garfield is no more. The long period of suffering consequent upon the fatal wound received on the second of July, at the hands of the assassin Guiteau, terminated in his death at five minutes of ten o'clock, on the evening of September 19th. The event had been foreshadowed for some time, and yet so prone is the mind to hope even against hope, that a constant state of anxiety and strain was kept up over the country, to which even the deep sorrow that has succeeded, affords a sad relief.

The whole nation is moved to tears by the lamentable event, which is felt by each individual as keenly as though it were the loss of one nearest and dearest to him. The grief is sincere, profound and universal.

The loss of a brave and good man is ever a dire calamity to our race, but there were other elements in this case besides the goodness and purity of character of the late President, to arouse general sympathy and feeling. The most pathetic stories that ever were told are those which portray suffering innocence. It was the blood shed on Calvary that established the permanent claim of Christianity to human sympathy and acceptance, which have been fed and nourished by countless lives of martyrs

through all succeeding generations. And nothing could illustrate more forcibly the power over the human mind and heart of the contemplation of unmerited suffering borne with fortitude and uncomplaining than the event we are discussing.

And is there no lesson we may learn from the scenes of the past twelve weeks, still so vividly pictured upon our minds? We who deal with death in all its forms need no reminder of the uncertainty of life, but we have our human weaknesses like other men, and we need just such examples of fortitude and resignation to teach us how to bear the trials which are in store for many of us. To prepare to meet whatever vicissitudes of fortune Providence may send is the part of true wisdom, and we may be convinced in advance that there can be no real contentment and satisfaction without a consciousness of one's own rectitude of purpose—the *mens conscia sibi recti*. Whilst the bells, then, from sea to sea and lake to gulf, are tolling the death knell of our beloved ruler, may we resolve to

"So live, that, when our summon comes, to join
The innumerable caravan, that moves
To the pale realms of shade where each shall
take

His chamber in the silent halls of death
We go not, like the quarry-slave at night,
Scourged to his dungeon; but sustain'd and
soothed

By an unfaltering trust, approach our grave
Like one who wraps the drapery of his couch
About him, and lies down to pleasant dreams."

THE MEDICAL ASPECTS OF THE PRESIDENT'S CASE.—Whilst as citizens we share equally with others the common sorrow for the loss of our ruler who was thrice endeared to us by his sufferings and death, as physicians our interest centres in the medical aspects of the case. It could hardly be expected that a person of such prominence could pass away from the scene of his labors and especially under circumstances of so peculiar a nature as those accompanying the last days of President Garfield, without a very close and severe scrutiny of all the events connected with his demise. Hence it should not surprise

us that criticisms should come from every source, especially since death has completed the history of the case, and the autopsy has exhibited so many surprises. Whilst the complete medical record of events must come from those who were in charge of the patient, and will probably not be forthcoming for some days at least, nevertheless the main facts in connection with it are already before us, and we feel that we are in a condition to draw some general conclusions from them.

The case presents two distinct stages, which require each separate consideration—the first extending from the reception of the wound to the establishment of pyæmia; the second from the establishment of pyæmia to death. Obviously any operation for the removal of the ball should have been attempted preferably during the first stage. No such attempt seems to have been made at any period of the case, and for this the physicians have been severely censured. But if the facts of the case be considered, such censure seems to us to be very undeserved. Here was a ball which, “after fracturing the right eleventh rib, had passed through the spinal column in front of the spinal cord, fracturing the body of the first lumbar vertebra, driving a number of small fragments of bone into the adjacent soft parts, and lodging below the pancreas, about two inches and a half to the left of the spine and behind the peritoneum, where it had become completely encysted.” How would it have been possible by probing to have followed the course of this ball and ascertained its exact location? And without ascertaining its exact position would any operation for its removal have been justifiable? Nothing could be more uncertain than the direction of a bullet striking the abdominal wall and impinging upon a resilient rib, and to search for it in a large cavity like the abdomen, containing organs of vital importance, the condition of which was in doubt, would have been rash in the extreme.

Later on when the fistulous track extending downwards towards the right groin seemed to indicate the direction the ball had taken, what more natural than that the tender point of induration

in the right iliac fossa should be supposed to be due to the irritation of the ball, and such was the impression which seemed to prevail in the minds of the attendants. Would probing or an opening here have been productive of any good?

The symptoms all indicated the absence of injury of vital organs and the possibility of pyæmia seemed very remote. The safest course, the one most free from risk, naturally appeared to be one of expectancy. Under these circumstances the encystment of the ball was a perfectly legitimate expectation.

Still later when symptoms of pyæmia became apparent, of what use would an incision into the abdomen have been? It could not have rendered accessible the track made by the ball through the body of the vertebra and which was doubtless the medium of the systemic infection, nor could it have removed the pyæmia already developed.

There are two points of view under which the case may be considered—one from the standpoint of the impressions derived from the symptoms observed during life, the other from these plus the *post-mortem* revelations. We have endeavored to show that operations undertaken with a view to the removal of the bullet either by probing or abdominal section were under either view of the case unwise and impracticable. Far better that the patient should have died from the wound inflicted by the assassin's bullet than by one caused by the surgeon's knife. Had an operation been performed, there are many who would have charged to it a share at least of the blame which should rest alone upon the shoulders of the guilty murderer. That these are secondary considerations, and that no physician should hesitate to do what he conceives to be his duty under such circumstances are self-evident propositions, and yet such considerations should not be entirely ignored.

From as complete a study, then, of this case, as we have been able to make, with the light now before us, we are convinced in the strongest manner that the surgeons have managed the treatment of it in such a way as to deserve only commendation and praise.

MISCELLANY.

ALBANY COLLEGE OF PHARMACY has been instituted, being the Department of Pharmacy of Union University. Two annual sessions of five months each are required for graduation, the first year's students being the junior, the second year's the senior class. Each class has separate courses of lectures, with examinations at the close of each course, which determine advancement in the one case, and graduation in the other. The exercises of the college will be held in the Albany Medical College building.

INFLUENCE OF THE GERM THEORY UPON MODERN SURGERY.—This revolution in the midst of which we still stand, although the first wave has exhausted itself, has been called forth by the *one* incontestable fact, that all those countless and incalculable disturbances by which the wounds, and hence also the life of those operated on or wounded, are threatened, are only the consequences of particular processes of decomposition of the animal fluids, brought about by the intrusion of lower organisms. *Volkman, Int. Med. Congress.*

In considering the definition of disease, after having observed how large a number of maladies are produced by the influences of all our ordinary surroundings, we have to recognize those external causes of an extraordinary or specific character which prey upon the human frame, and often bring its machinery to an end. Now, if these causes are obviously parasitic, we are not witnessing so much the case of disease as the spectacle of one animal preying upon another. As regards the parasite, it is pursuing its normal life-history, and as regards the patient or the host, he is simply being destroyed; the difference in his mode of death from that which would result from the onslaught of a wild animal, consists merely in time. If a

man fall a victim to the bite of a cobra, he is not said to die of disease, but the term is applicable if he dies of glanders. There is this difference, however, in the latter case: the poison is not a natural one, even in the infecting animal. If, however, in these infectious diseases the morbid cause is an animal or vegetable organism, although microscopic, then we really have to deal with the operation of one living being acting upon another, and the so called specific malady exhibits nothing more than the natural course of life of certain specific organisms. The term disease, according to the definition, is here again scarcely applicable. *Wilks, Int. Med. Cong.*

AMERICAN GYNÆCOLOGICAL SOCIETY.—The sixth annual meeting of the American Gynæcological Society was convened in the hall of the New York Academy of Medicine, on Wednesday, Sept. 21st, the President, Dr. Wm. H. Byford, of Chicago, in the chair. The papers that attracted most discussion (according to the *Herald*) were those of Dr. Garrigues, of New York, on "Exploratory Punctures of the Abdomen," and Dr. G. H. Lyman, of Boston, on "Cure of Pelvic Abscess." Several new members were elected.

EITHER fluids do not form now, as before the introduction of antiseptic precautions—or, if they do, they do not putrefy—and they are absorbed without doing any harm, without leading even to any febrile rise of temperature. I do not say that I have not seen one or two fatal cases, where it might have been better if I had drained, or that, in one or two, part of the wound has not reopened, and permitted the escape of some fluid. My present feeling in regard to the tubes is that the case must be very exceptional indeed in which I shall venture to use one. *T. Spencer Wells, Int. Med. Congress.*

ORIGIN AND CURE OF SCROFULOUS NECK.—Allbutt insists upon the frequent local origin of scrofulous neck, irritation of neighboring mucous membranes being the most common cause. After minute inquiry into possible morbid influences acting through the mucous membrane, a rapid and complete cure without disfigurement must generally be sought by surgical means, free incision and enucleation of caseous deposits being essential. *Int. Med. Congress.*

RESPONSIBILITY OF MODERN SURGEONS.—To-day we may say, with the deepest conviction, that the surgeon is responsible for every disturbance that occurs in a wound; that it is his fault if even the slightest reaction or redness is developed in it, or if an amputation is not healed by first intention. He must reproach himself severely if after an operation bagging of pus occurs, and especially if death occurs from pyæmia—*Volkman, Int. Med. Congress.*

PNEUMONIA INFECTIOUS.—To sum up, acute lobar pneumonia is an acute infectious disease, dependent upon the introduction into the system of a specific poison, the visible expression of whose activity is a croupous inflammation of the lungs, and may be classed among the miasmatic contagious group belonging thus to the same class of maladies as typhoid fever. In all probability, the poison is taken into the organism by absorption through the lungs, that is, by inhalation. *Archives of Med., August.*

THE uterus and the spleen, the stomach, the pylorus and the colon, have each and all been subjected to the scalpel of the surgeon, with what success has yet to be determined; and it is for you to decide whether some, at least, of these operations constitute real and solid advances in our art, or whether they are rather to be regarded as bold and skilful experiments on the endurance and reparative power of the

human frame—whether in fact they are surgical triumphs or operative audacities. There must, indeed, be a limit to the progress of operative surgery in this direction. Are we at present in a position to define it? There cannot always be new fields for conquest by the knife; there must be portions of the human frame that will ever remain sacred from its intrusion, at least in the hands of the surgeon. *Erichsen, Int. Med. Cong.*

DR. THEOPHILUS PARVIN (*American Practitioner, July*) opposes coition during pregnancy on the ground that it is against the law of nature, as indicated among the lower animals, that it is generally odious and often painful to the woman, that it is a frequent cause of abortion (he estimates one-half the cases of spontaneous abortion to be due to it), and that it probably in many instances increases the leucorrhœa, nausea, and vomiting, of the early months.

A tumor involving the cerebellum gives rise to motor disturbances which are characteristic, the commonest being a peculiar reeling gait, resembling the walk of a drunken man, or that of a person on the deck of a vessel at sea in rough weather. Hughlings Jackson believes this symptom to be due, not to any ataxy of the legs, but to a paresis of the muscles of the spine, which causes an uncertainty in the maintenance of the spinal equilibrium; and thus the legs act erratically, because they have to "run after" the trunk to prop it up in its various inclinations. Later on this paresis gradually becomes more general, so that the legs are no longer able to prop up the now powerless trunk. *Brit. Med. Journ., July 2.*

THE treatment of aneurism is one of those great questions which from an early period in the history of modern surgery has occupied the attention of practitioners, and has undergone no little fluctuation. A

few years ago the battle between the ligature and compression appeared to have been decided in favor of the latter; but the invention of improved ligatures, made of various kinds of animal tissue, and applied with antiseptic precautions, has once more inclined the balance of professional opinion toward the Hunterian operation. But now again the practice of compression has received renewed strength from the employment of Es-march's elastic bandage in the cure of certain forms of external aneurism, and it is for you to determine in what cases it can be used with advantage, and in what way a cure is effected by its means. For in the treatment of aneurisms, as in that of so many other surgical diseases, the wiser and more scientific course is to follow a judicious system of selection in the method to be employed in each particular case, rather than to subject all to one unbending line of practice. *Erichsen, Int. Med. Cong.*

M. LITRE, who died recently in Paris, was the author of an edition of the works of Hippocrates which is considered the most complete in existence. He was over eighty years of age.

Mr. Croft reaffirmed the safety and utility of applying plaster-of-Paris splints (lateral) immediately for simple fractures of the bones of the leg and foot. His six years experience was decidedly in favor of covering the injured or swollen part immediately. Only the most severe cases of contusion and subcutaneous laceration were excepted. The special advantages are uniform pressure; complete fixation of the broken bones and injured muscles; perfect adaptation to the limb and maintenance of extension; diminution of risks of pressure, sores, pains or excoriations; diminution of risks of delayed union; facilities for quick removal and reapplication; comfort to the patient; freedom of movement al-

lowed to the patient; simplicity and cheapness; economy of time and trouble. No evil results had followed this method. He thought the average stay of patients in hospital had been shortened, but he could not state positively that the cure had been materially shortened. Its adaptability to fractures of the femur, patella, pelvis and spine was touched upon.—*Brit. Med. Journal, July 2.*

Professor Annandale, of Edinburgh, gave the following advice in a valedictory address to medical graduates: First, not to think that they were fully equipped with all knowledge but to go on learning the practical parts of their profession. Secondly, not to consider that they had any vested rights in their patients. Thirdly, while willing in proper circumstances of poverty, misfortune, etc., to give their services, they must, as a rule, expect and require from their patients proper monetary remuneration. Fourthly, never to object to consultations with their professional brethren, if their patients desire it. Fifthly, not to enter too actively into the region of politics, general, local or theological.—*Lancet.*

ATLANTA MEDICAL REGISTER.—With the October number the *Atlanta Medical and Surgical Journal* assumes this title, and passes under the editorial management of Drs. James B. Baird and John Thad. Johnson. The subscription price has been reduced to \$2.50 per annum. Among the names of expected contributors we find many of the leading writers of the South. The October number presents a very creditable appearance, the leading article being by Dr. Rohé, of this city. The *Register* has our best wishes for its success.

PRIZE ESSAY.—The Committee of Selection appointed by the chairman of the section on Practical Medicine, Materia Medica and Physiology, at the recent meeting of the American Med-

ical Association, have selected and hereby announce, as the subject for the prize to be awarded in 1883 the following question: What are the special modes of action, or therapeutical effects upon the human system, of water, quinia and salicylic acid, when used as anti-pyretics in the treatment of disease? The essays must be founded on original, experimental and clinical observations, and must be presented to the Chairman of the Committee of Award on or before the first day of January, 1883.

N. S. DAVIS, }
H. D. HOLTON, } Com. of Selection.
W. B. ULRICH, }

SOCIETY BULLETIN.—*Academy of Medicine* will meet Tuesday, Oct. 18, 8.30 P. M.—*Clinical Society* will meet Friday, Oct. 7th, 8 P. M.; *Dr. J. W. Chambers* will read a paper on "Nerve-Stretching in Locomotor Ataxy."—*Medical Association* will meet Monday, Oct. 10th, 8 P. M.; *Dr. Joseph T. Smith* will open the regular discussion.—*Medical and Surgical Society* meets every Wednesday, at 8.30 P. M.—*Obstetrical and Gynecological Section, Medical and Chirurgical Faculty of Maryland*, meets fourth Friday of each month, 8.15 P. M.

PREVENTION OF PYÆMIA.—By no ventilation in the world can septicæmia, pyæmia and erysipelas be blown out of the hospitals; not even by the most assiduous care in ordinary life can they be avoided, but only by the conscientiousness and prudence of the surgeon. If ever the excellent Simpson was right in his assertion that far more operated patients die in hospitals than in private practice, modern surgery may rather declare the contrary. If there is any danger of a mistake in the treatment of a wound it is more apt to happen in a private house, where it is more difficult to satisfy the accurate demands of modern surgery than in the hospitals.—*Volkmann, Int. Med. Congress.*

THERE is still difference of opinion and of practice among surgeons, not only as to the comparative advantages of the "open air" method and that in which all atmospheric contact is carefully guarded against; of the "dry" and of the "moist" system of dressing; as to whether the "antiseptic method" in a modified form suffices, or whether the more elaborate system of local treatment before, during and after an operation, which has been devised by the skill and worked out by the unwearied labor of Lister, be essential in case of operation wound.—*Erichsen, Int. Med. Congress.*

OBITUARY.

PROF. EDWARD LLOYD HOWARD.—Baltimore was startled, Sept. 5th, by the announcement of the sudden death by drowning of Prof. Edward Lloyd Howard, M. D., one of the most prominent and influential physicians in this State. He was on his way to the Marine (Quarantine) Hospital, of which he was the resident physician, and had gone on board a tug boat in the lower harbor from the deck of which he fell into the water and perished before assistance could reach him. No one was near him at the time, but it is supposed that he had a stroke of uræmic apoplexy, as he was known to have suffered from serious symptoms of subacute nephritis consequent upon an attack of yellow fever in 1878. The body was recovered with grappling irons, and interred Sept. 7th at Garrison Forest Church, Baltimore county.

Dr. Howard was born in this city Jan. 14th, 1837. He was a grandson, on the one side, of Gen. John Eager Howard, the revolutionary hero, and on the other of Francis S. Key, the author of the "Star Spangled Banner." After receiving a liberal academic training he attended lectures at the University of Maryland, receiving his

degree in 1861. Shortly after, he went south, and espoused the Confederate cause. Notwithstanding his youth, his ability was so conspicuous that upon the recommendation of the medical examining board, he received from the Confederate States Government an immediate appointment as full surgeon. He served during the war with distinction in several positions of prominence and responsibility, and at its close returned to Baltimore and resumed his practice. Since that period he has taken a leading part in medical affairs in Maryland, and has been honored in many ways. At the time of his death he was President of the Maryland State Board of Health, Resident Physician of the Marine (Quarantine) Hospital, Professor of *Materia Medica*, Therapeutics and Medical Jurisprudence in the College of Physicians and Surgeons, and Professor of Chemistry in the Baltimore College of Dental Surgery. He had previously held the position of Secretary of the State Board of Health, which was established through his efforts and influence. He was one of the founders and first faculty of the College of Physicians and Surgeons. He was one of the three members of the Yellow Fever Commission appointed in 1878 by the Government to investigate the yellow fever epidemic then raging in the lower Mississippi Valley. He edited jointly with Dr. Latimer, in 1870-71, the Baltimore Medical Journal.

In the discharge of all the varied and versatile duties which these several positions have imposed upon him, Dr. Howard has displayed consummate ability. He never had a large practice, for the drudgery of which, perhaps, he was constitutionally unsuited. His tastes were strongly literary and he wrote well and forcibly, but it was as a speaker that he was calculated to attract most attention. He spoke slowly and with deliberation. He never hesitated, however, for the

use of a word, and he had a remarkable faculty for seeing through a subject and mastering its details. His style was concise and pointed, his logic lucid and convincing. Few men could say as much in a few words and with so much effect. These qualities gave him great advantage in debate, in which he had not his superior, and they fully compensated for his rather youthful appearance and under medium size. He had a wonderful equanimity, which seemed incapable of being disturbed. He was a man of high and honorable instincts and of sincere, unassuming, and refined manners. His courage was of the highest order and he never shrank from exposure to the most malignant forms of disease, but was always ready to offer his services in cases of epidemic or pestilence. An instance of this was afforded at the Marine Hospital, during the prevalence of a very fatal typhus, when the resident physician Dr. Conrad, was struck down and there were *thirty* applicants for his expected vacancy. Not one of these gentlemen would take the dreaded post, but Dr. Howard volunteered without a moment's hesitation and devoted himself incessantly to the fever patients.

With reference to religion and creeds, Dr. Howard had very decided views which subjected him to much adverse criticism. At least we may say his was honest conviction, which does not shun the light of day.

In conclusion, we may say few of our profession in this State have wielded as much influence in medical affairs or had as large a share of the esteem and affection of their colleagues as Dr. Howard, and his death in the prime of his age and fullness of his usefulness cannot be regarded in any other light than that of a public calamity—for who can take his place?—who is there capable of rendering such services to the profession and the State as he has rendered?

At a meeting of the Medical and

Chirurgical Faculty of Maryland, held on the 9th ult., after glowing tributes from Drs. Steuart, Latimer, Conrad and Chew, and a motion requesting Dr. Latimer to prepare a memoir of his deceased friend, the following resolutions were adopted:

1. That in the death of PROFESSOR E. LLOYD HOWARD, M. D., the State and city have lost a most zealous and efficient officer, whose devotion to duty was alike evinced in his courage, his vigilance, his integrity and his undoubted professional qualification.

2. That from the medical profession has passed one whom living we delighted to honor and whose death we deeply deplore.

3. That his genial courtesy, wise forbearance and great generosity, no less than his rich store of knowledge and ripe wisdom, made him one whose society was to be courted, and whose friendship esteemed a boon.

4. That our tenderest sympathies attend all who knew and loved him.

THOMAS S. LATIMER, }
JAMES A. STEUART, } Committee.
JOHN S. CONRAD, }

Resolutions of a similar purport were also adopted by the Alumni Association of the College of Physicians and Surgeons, and by the Faculty and students of the Baltimore Dental College.

At a meeting of the Alumni of the College of Physicians and Surgeons held September 8th, the following resolutions were adopted:

WHEREAS, We have heard with profound regret of the sudden death of our honored associate and former teacher, Professor E. LLOYD HOWARD, and desiring to express publicly our sense of the loss which our Association, as well as the Medical Profession, has sustained by his death, we hereby

Resolve, 1. That the Alumni Association of the College of Physicians and Surgeons do hereby put on record their appreciative sense of the valuable public services rendered by the deceased, his untiring industry in the pursuit of knowledge, his efforts in the cause of science and humanity, and his eloquence and success as a teacher. In his spirit and intercourse kind and genial, in his views and influence progressive, in his official trust diligent and self-sacrificing, he was an honored member of an honorable calling.

Resolve, 2. That a copy of these resolutions be furnished to the family of the deceased, spread upon the minutes of the Association and published in the Maryland Medical Journal and Baltimore Sun.

Signed: GEO. H. ROHE, }
THOS. B. EVANS, } Committee.
H. J. LACIAR, }

MEDICAL ITEMS.

Dr. B. B. Browne has been elected a member of the American Gynecological Society.=Mr. Wm. MacCormac, the Secretary-General of the International Medical Congress has been knighted in recognition of his services.=In the treatment of the common diseases, a physician can obtain his most valuable instruction in his own country, among those whom he is to treat.—*Billings*.=Malarial diseases are reappearing in many parts of New England.=The regular winter course of Lectures at the College of Physicians and Surgeons of this city, was opened on the evening of Sept. 14th with an introductory lecture by Prof. A. Friedenwald.=The 6th An. meeting of the American Academy of Medicine was held in New York, Sept. 20th; Dr. Bombaugh, of this city, read a paper on "The Prevalent Misuse of the Term Allopathy."=The St. Louis Med. College, which adopted the three year graded course a year ago, announces that the plan has been pursued with complete success, and will be continued.=A law regarding color-blindness has been enacted in Massachusetts.=Billroth is said to be very corpulent.=Skoda's brain weighed only 45 ounces.=Pasteur has received the Grand Cross of the Legion of Honor.=The Annual course of Lectures in Berlin for *Medical Practitioners* will commence this month.=Hammond has seen three deaths which he attributes to the use of the bromides in epilepsy. In none was the dose over 15 grains thrice daily. In two pneumonia supervened while the patients were under the influence of the drug. In three other cases large carbuncles were produced.=The *British Med. Journal* calls upon the medical profession to take a firm stand against the obstacles thrown in the way of vivisection by the government of that country.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

ON THE TREATMENT OF SYPHILIS BY HYPODER- MIC INJECTIONS.

BY I. BERMAN, M. D., OF BALTIMORE.

The practical conclusions I came to, from my investigations on the fungus of syphilis, (see *Archives Medicine*, December, 1880) have culminated in the thesis that the most rational way to counteract the influence of these micro-organisms is to endeavor to combat them in the most direct way. Since the lymphatic vessels and glands are those parts of the organism chiefly affected by the fungoid growth described, it necessarily follows that a curative agent against the disease develops its qualities all the more, the more directly it is brought to bear on the lymphatic system.

As the lymphatic vessels are the agents of resorption, it is clear that any fluid applied hypodermically will be at once brought into contact with them.

I had previously accumulated a large amount of experience in the treatment of syphilis, by hypodermic injections of bichloride of mercury, and since my discovery of this fungoid, I have treated my patients exclusively in this manner, even where (as in syphilitic affections of the eye) a prompt mercurialization was imperative.

From a variety of cases I select a few to illustrate my way of proceeding.

M. N., prostitute, in July, '79, applied to me for treatment, on account of an inflamed eye, treated *ab alio*, by fly blisters behind the ear for some time without result. She presented a characteristic appearance of iritis syphilitica, showing a most exquisite specimen of gumma on the lower part of the iris, pressing against the cornea. Further examination developed a papulo-maculous eruption over the whole body, polyadenitis, and plaques muqueuses of the fauces.—Besides being kept in a dark room, and having atropia instilled to absolute mydriasis, I gave hypodermic injections of a 0.5 per cent. solution of hydrarg. bichlor. corr., with chloride of sodium,

every morning and evening. After twelve injections the exanthem had disappeared, the iritis was fast improving, and I then injected only once a day. When thirty-five injections had been applied—incorporating in this way eighteen centigrammes of the preparation—I discharged the patient cured, advising her to take, for some weeks following, tinct. of iodine, five drops in water three times a day. I kept her under observation for several weeks, urging her to apply to me on the appearance of any slight symptom of relapse, but did not see her again for about a year. Up to this time no relapse had occurred, and the most minute examination failed to show any symptoms of the disease. She assured me she was in perfect health, and had been ever since I discharged her.

August, '79, P. K., aged 21, travelling agent, presented himself, with iritis syphilitica oculi utriusque. The initial sclerosis was not yet healed up, and besides a florid exanthem there was a very pronounced polyadenitis. The same treatment was pursued, and although in this case posterior synechiæ had formed on both eyes, by the timely use of atropine these adhesions were so loosened that they did not impair the functions of the iris, and he was discharged after four weeks, having had altogether twenty-five injections. In neither of these cases could the slightest trace of stomatitis be observed, and I may say here, that only where other treatment has preceded mine, and mercury has been given injudiciously, per os, have such accidents come under my observation.

L. M., brushmaker, came to me in December, 1879, with iritis syphilitica of left eye. The exanthem was well marked, the initial sclerosis, though healed up, was still very noticeable. The treatment was the same as in the preceding cases, and the result such that I was enabled to dis-

charge him cured, after four weeks. He presented himself for inspection from time to time, but no relapse has shown itself up to this day.

The following case will show that also in deeper seated lesions, occurring years after the primary infection, beneficial results may be obtained by hypodermic injections:

M. R., master-mariner, in December 1879, came under my treatment with paralysis musculi recti externi oculi dextri. *Ex juvantibus et nocentibus* the syphilitic nature of the affection was demonstrated, the patient not improving under electric treatment. A free use of hypodermic injections of sublimate, combined with application of the faradic current, produced marked improvement. This was followed by bi-weekly hypodermic injections of pilocarpine muriaticum, and five drops tinct. iodine taken three times daily in water. At this time he begged to be dismissed as his ship was about to sail. The functions of the muscles were not entirely normal, but there was no longer any impaired vision. I instructed him in the use of the electric battery, that he might himself apply it during his journey, and gave a sufficient number of pills of iodoform to last until he reached England, when he was directed to report to an oculist in Liverpool. This he never did, but six months after, on a return trip, presented himself to me, completely cured. I have since heard from him that he continues perfectly well.

H. W. S., twenty-five years old, had been under treatment—whether for syphilis or not I cannot determine—for two months, when he was sent to me for an affection of the throat. Superficial examination persuaded me of the syphilitic nature of his case, and further careful examination disclosed a really classical "induratio papyracea," accompanied by a profuse mixed papulo-maculous and pustular eruption over the whole body; besides

this a perforation of the septum narium had taken place.

As I usually do in such cases, I informed him that there were several methods of treatment, and if he wished to follow his business avocations, the most satisfactory plan would be the use of hypodermic injections. I warned him that this was a little painful, especially in the beginning, but would relieve me from the necessity of disturbing his digestion by the internal use of mercury. I began treatment at once, and was glad to learn from the patient that he found the injections less painful than my remarks had led him to expect. I applied altogether thirty injections, followed by continued use of iodide of potassium, at the same time cauterizing the perforation of the septum narium with nitrate of silver in substance.

Within twelve days—that is, after twelve injections—the eruption had disappeared, the initial sclerosis was entirely healed up and much softer. The ulcerations of larynx and pharynx were also energetically treated with local applications of nitrate of silver, and quickly disappeared.

As a precautionary measure, I prescribed a five per cent. solution of iodide of potassium, one tablespoonful four times daily for six weeks. I afterwards found that mercury had been given internally during the two months preceding my treatment, and therefore advised the use of a Russian bath twice a week. Under this treatment the patient became perfectly well, has had no relapse to this day, and was enabled to pursue his daily avocations—in his case a most important item—without a single interruption. Of the initial sclerosis and polyadenitis the most minute examination does not show the slightest trace.

G. C. dates his infection from June 10th, 1880, and, although a thorough examination of the woman by whom he was infected proved her perfectly healthy, it was elicited that a few

hours before she had had connection with an individual affected with latent syphilis. I may add that I kept this woman under observation for the next six months, and convinced myself of her remaining free of the taint. On September 1st he presented himself again, with full-blown eruptions over his whole body, and a slight, healed-up induration on the prepuce. He submitted to the injection treatment without difficulty, receiving in all twenty-five applications. In this case, also, laryngitis and pharyngitis syphilitica were the cause of his coming to me.

Every trace of the disease, even the induration, had vanished on September 29th. According to my usual rule, I prescribed a course of iodide of potassium for the next six weeks, and kept him under my eye, examining him regularly every fortnight. Up to this date not the slightest relapse has occurred, and, although the cure was a remarkably quick one—having been accomplished in six weeks—I do not hesitate to say that it is permanent, since frequent microscopical examinations of his blood—which I never neglect in such cases—show entire absence of those bacteriæ always to be found in the blood of persons affected with syphilis. These bacteriæ have been described since my publication (see *Archiv. Med.*, Dec. 1880,) by Aufrecht, in Magdeburg, who found them in the secretions and substance of condylomata lata, but not in the blood.—vide *Centralblatt für die Medicinischen Wissenschaften*, No. 13, 1881. I have never failed to find them in the blood of syphilitic persons, and shall be very glad to demonstrate them to any brother physician versed in microscopical examinations.

M. D., contracted syphilis nine months ago, and was treated *ab alio*, as far as I can elucidate, with protoioduretum hydrargyri, and iodide of potassium for about four months, and then pronounced cured. He was sent to me Sept. 9th, with iritis specifica oculi

sinistri. He had been afflicted in his left eye three weeks before he came to me, and had been treating himself according to former directions given when treated for the other eye, the iris of which was almost circularly adherent to the capsule of the lens, and consequently there were also extensive posterior synechiae on the freshly afflicted left eye, which the most extensive use of atropine could not loosen. At the same time he complained of dolores osteocopi, and excruciating headaches. A very singular eruption, not frequently observed in syphilis, had appeared over his whole body, which consisted of patches varying in size from one-quarter to half a square inch, irregular in form and arrangement, the circumference of each patch consisting of an irregular dark red outline, whilst the central part was almost normal in appearance. In this case, since a prompt mercurialization seemed desirable, I accompanied the hypodermic injections with inunctions of small quantities of mercurial ointment with ext. belladonna over the eyebrows. As the patient was much debilitated I also prescribed iron in pills, and effected a decrease of the pains in six days. After twelve days I was obliged to leave off the mercurial treatment because he showed signs of stomatitis, and confined myself to a free use of iodide of potassium and iron. The pericorneal injection disappeared entirely within three weeks, as also did the headaches and dolores osteocopi. The exanthem vanished without leaving a trace behind; the vision of the eye has been preserved intact, and although an iridectomy will shortly be necessary on account of the numerous adhesions on both eyes, I have full confidence in his ultimate complete recovery.

In all these cases, and in many similar ones, which I need not describe here, I have never produced a single abscess; in fact every trace of the

injection disappeared within a few days after its application, leaving only a slight soreness for about a week, and the advantages of this treatment seem to me so obvious that they deserve a fair trial. They are: 1. The incorporation of only a minimum quantity of mercury; 2. the liberty to apply stimulants, tonics and other medicines internally, if desirable; 3. the possibility of keeping perfect secrecy of the disease, and of treating it without interfering with the patient's business; 4. the remarkably short time required for the cure of it.

The disadvantages might be summed up in the slight painfulness accompanying the injections, and in the expense involved by the daily visit of the patient to his physician.

The solution I use most frequently is prepared after the following formula:

Ry.	Hydrarg. bichlor corr.,	-	0,2
	Natr. chlorid.	- - -	2,0
	Aq. distill.	- - -	40,0

Especial attention should be given to the thorough cleanliness of the syringe and to the perfect transparency of the solution.

The injection ought to be made, without exception, under the skin of the back, especially above and below the scapulæ and in the lateral regions of the lower ribs, where a fold of the skin can be easily taken up. By inserting the needle into the fold, injecting slowly and rubbing it softly for a short time, in order to hasten the resorption, the pain is materially lessened.

At the lowest estimate, I have made about 2,500 of these injections, without ever having had to stop the treatment on account of extreme painfulness or occurrence of abscesses. Whenever these do occur, they are certainly only caused by neglecting one or the other of the above rules.

TREATMENT OF HIP-JOINT DISEASE.

BY JNO. N. MONMONIER, M. D.,

Late Prof. of Operative Surgery and Anatomy,
Washington University, Balto.*(A Paper read before the Baltimore Medical and
Surgical Society).**(Continued from last number, p. 249).*

Scarcely of less importance than the question of the antiphlogistic and counterirritant system, and of the constitutional treatment by support and tonics, without local treatment except the use of a splint to secure rest to the joint, is the question as to the means by which we may not only secure perfect rest to the joint without confining the patient to the bed or the couch, but allowing him to walk about with the assistance of crutches during the early progress of the disease.

All surgeons are agreed upon the absolute necessity of securing perfect rest to the joint. The production of pain on motion, whilst the patient is absolutely free from pain when lying down in bed, would clearly indicate the necessity of fixing the joint by some mechanical means, so as to secure as far as possible complete immobility. Usually, the apparatus employed to effect this object, namely the long, straight splint from the axilla to the foot, has also rendered necessary the recumbent position which has not been thought to be any disadvantage, but on the contrary, a positive advantage in the treatment of the case. In fact, lying down, either in bed, or on a couch specially constructed for the purpose, has been, and still is, very generally recommended as a part of the curative plan of treatment; and this lying down has generally been continued so long as pain on motion or a percussion over the joint indicates the continuance of the disease. This period has frequently extended to one or two years. Even at the present time, in cases of hip-joint disease in the first stage the order is sometimes

given that the child must lie down for two years.

The use of the straight splint has of late years been to some extent superseded by the employment of strong leather splints moulded to the body from the waist and extending to the knee. The leather splint is by no means a new invention. I have used it for the last fifteen years and it was certainly employed long before that time; but generally it has been applied only in the last stage of the disease, when the patient is allowed to walk about after the bursting of the abscesses, and when chronic discharge continues from fistulous openings; I should also say in cases in which the patient appears to be recovering after the long continuance of the first stage. Essentially, then, the leather splint has been employed only after the activity of the disease has subsided.

The plan I generally adopt, except during the period of acute pain, is to apply a leather splint from the very beginning, and continue its use to the end of the disease, through all stages; and from first to last I allow the patient to walk about with the assistance of crutches, when he is so inclined. By this means we ensure rest to the diseased joint, whilst the constitutional powers of the patient are much improved by walking about at the seaside or in the country. Children who suffer pain on the slightest motion of the leg, whilst they are confined to bed, in a few days find so much comfort from the support to the joint given by the splint that they begin to walk with confidence, of course using crutches. The explanation of the relief to pain in these cases is, probably, not only the support to the joint afforded by the splint, and the immobility which it ensures, but the fact that the leg is brought into a straight position by which some point of contact and interarticular pressure of inflamed surfaces in the joint is relieved.

In some cases, quite at the com-

mencement of the disease in young children, I have with advantage employed the straight splint and kept the child on the sofa for a few weeks, avoiding the bed in the daytime as tending to debilitate the patient. Sometimes I have used the straight splint when there has been a sudden accession of pain; but under these circumstances, when the disease has existed for sometime, I have within the last few years relied frequently upon the system of making extension by means of a weight of from three to four pounds attached to the leg, and playing over a pulley fastened to the end of the couch. The method consists in pressing a band well padded in the perineum of the opposite side carried over the groin and fastened to the head of the bed or some firm object, whilst the cord is attached to an anklet around the ankle of the affected side and passing over the pulley at the foot of the bed ends with the weight. If this plan relieves the pain, which it generally does, it affords additional comfort to the patient by allowing a certain amount of motion; and this does not re-excite pain so long as the extension is maintained. I have seen the children even sit up in bed and eat their meals with comfort; but if the extension was not maintained, pain would quickly return. Also I have tried with advantage and with great relief from pain the anterior suspensory splint of the late Prof. N. R. Smith, extending from the hips to the toes, with great obliquity of the cord downward so as to keep up considerable traction, with elevation of the foot of the bed by means of several bricks in order to make the patient's body fall backwards down an inclined plane which latter does away with the perineal band, often producing chafing and uneasiness. The aim of all surgeons has been to keep up extension and counter-extension by some mechanical appliance, the patient either lying down

or walking. Many such appliances have proved perfectly worthless and in fact injurious. Mention only will be made of the more valuable kinds of apparatus,—those which approach perfection. Of American surgeons are Davis', Agnew's, Andrews', Taylor's and Sayre's. All are particularly serviceable as they keep up extension and counter-extension while the patient is enabled to walk about. In Sayre's extension is made from the knee, and counter extension from the pelvis and lengthening of the apparatus is brought about by a rack and pinion on the outer bar. Erichsen thinks favorably of Sayre's arrangement, but considers that the best apparatus that has yet been invented for hip disease is that of H. O. Thomas. In brief, as to the application and description of this apparatus: Two shoulder straps over the shoulders as ordinary suspenders, attached front and back to a thoracic band around the chest, immediately under the axillæ, a pelvic band passing around the upper part of the pelvis; a splint extending from axilla band under the pelvic band over the posterior part of buttock to a band around the upper part of the thigh with extension pieces downward to a band around the calf of the leg. The patient is laid in the splint, the limb falls into a straight position, and having been fixed, exercise may be allowed, the patient walking on crutches, with a patten to raise the sound foot, and so carry the diseased limb well from the ground. Most certainly I should judge the preference of all others should be given to that of Sayre for its simplicity, ease to the patient, freedom of movement of body which is not hampered as in Thomas' cumbersome apparatus.

The *period of acute pain*, the accession of which occurs only in some cases of hip-joint disease, probably in the proportion of about one in ten cases, forms a most

important epoch in the history of this affection; important in itself, as tending to exhaust the powers of the patient, and generally supposed to indicate an acute stage of inflammation requiring active antiphlogistic treatment, both locally and constitutionally; and important in the results to which it tends. It frequently corresponds to a traditional condition between the first and second stages, and terminates in external abscess, with complete destruction of the joint, dislocation, &c. It also not unfrequently terminates in dislocation without formation of external abscess, and with the dislocation all the acute symptoms usually subside.

It has been observed by some authors that when dislocation takes place under these circumstances, the disease sometimes ceases; but the fact is, the pain ceases because the cause of pain, namely, the pressure of the inflamed articular surfaces, is removed by the dislocation of the head of the bone, produced, as I believe, by muscular action after the ulcerative destruction of the round ligament.

The period of acute pain, to which I wish to draw special attention, forms, when it does occur, the most distressing feature in the progress of hip-joint disease. It generally continues for two or three months, sometimes longer, and during this period the child is in great agony, frequently screaming, and in dread of the least movement—even of any one crossing the room or coming near the bed. The nights are sleepless from increase of pain, the child suffers from profuse night sweats, and wastes sometimes quickly. There is frequently an appearance of hectic, and the expression of the countenance is peculiarly indicative of fear or terror, evidently from the dread of motion. Muscular jerkings or startings of the limb are also present, and the thigh is always drawn up in a flexed position and inverted, so that the knee frequently lies across

the thigh of the same limb. I have noticed only once the limb during the period of acute pain abducted and the foot everted. In the region of the hip there is always a great deal of swelling, with acute local tenderness, symptoms which, taken together with the general condition of the patient, would always lead to the supposition of the formation of abscess, and acute suppuration sometimes occurs at this period, though, since it has been proven that these symptoms, as a general rule, all rapidly disappear under a plan of simple mechanical extension, we need be less apprehensive than formerly of suppuration taking place. An explanation of this acute pain has been given by Dr. H. G. Davis, of New York, and a method for its relief proposed by him, which, so far as experience has gone, seems to prove the correctness of the views entertained by him. Dr. Davis considers that the period of acute pain does not necessarily indicate any increase of the inflammation or extension to any particular structures; nor does it indicate the commencement of suppuration, as generally supposed; but that it depends on inter-articular pressure, *i. e.*, the forcible contact and pressure of inflamed articular surfaces, produced by the abnormal contraction of the muscles surrounding the articulation; and the proof of this is to be found in the fact that the acute pain is, as a general rule, removed within a few hours by simple mechanical extension made by a weight attached to the leg, ranging from three to five or seven pounds. In Dr. Davis' work on Conservative Surgery, published nine years since, we read, page 206: "We fully consider it established that when disease about a joint renders the movements of that joint painful, the joint is always liable to be destroyed by an uninterrupted pressure effected through the contraction of the muscles passing over it." And again, on page 212: "In diseases of joints, we

were the first to point out, as an always present factor in their destruction, the existence of an unremitting pressure, as effected by contraction of the muscles passing over the joints, causing constant forcible apposition of the surfaces within the joint. This is a general principle appertaining not only to the hips, but to all joints similarly affected. The application of this universal principle should guide us in any joint affection, whether the disease be internal or external, as soon as the disease renders the movements of the limb painful. * * *

When this fact was fully established in our mind we were led to seek the best way of counteracting the contraction of the muscles, and soon came to the conclusion that a constantly acting force, however moderate, must eventually weary muscles, by giving them no respite. We adopted the weight as applied by means of the cord, pulley and adhesive strips for this purpose, when the patient was confined to the bed or couch. This answered the indication perfectly, relieving all pain and constitutional disturbance, enabling the patient to enjoy his days free of pain, and to rest quietly at night, relish his food and to be nourished by it; in short, it robbed the disease of all its terrors."

Dr. Davis does not precisely state the period at which he arrived at the above conclusion as to the cause of acute pain and its method of treatment, but it must have been anterior to the year '55, which is the date of the manufacture of his extension splint by Otto & Reynders, instrument makers, New York. At page 308 he writes: "In 1856 I had fully established the treatment of morbus coxarius upon the plan of overcoming the pressure effected by the muscles, through the means of *continued elastic extension*; and the mode with its results was very flatteringly commented upon by one of the editors of the *American Medical Monthly* of this city, in March, 1857. In April, 1860." Dr. Davis

adds, "I gave the *American Medical Monthly* 'The Mechanical Means adopted in the Treatment of Morbus Coxarius,' in which was given a detailed description of my apparatus, and its application with a plate."

The plan that Mr. Adams of London generally adopts is represented by a perineal band extending around the hips and groin of the sound side and attached to the head of the bed with a band passing around the ankle of the affected side to which is attached a cord passing over a pulley and suspending a weight.

There can be no doubt that inter-articular pressure, or the pressure of inflamed articular surfaces—one surface being generally pressed against the margin of the opposite articular surface—must take place when the joint is drawn into the flexed position by the rigid contraction of the muscles, more or less of a spasmodic character which always co-exists with the period of acute pain. Mr. Hilton, an English Surgeon, has noted particularly this fact in his lectures "On Rest and Pain," and explained it to be the result of reflex nervous irritation, depending upon the anatomical fact of the various muscles surrounding the joint being supplied by branches of the same nerves which are also distributed to the interior of the joint.

The explanation of this period of acute pain in joint diseases, and its dependance on inter-articular pressure, produced by the abnormal contraction of the muscle surrounding the articulation, was some nine years since brought before the profession in a very able paper by Mr. F. H. Marsh, in the *Bartholomew's Hospital Reports*. In this paper the subject is thoroughly discussed and a series of cases given, in illustration of the fact established by Mr. Davis, that the pain is removable by mechanical extension alone, no local or general treatment being adopted, even in cases of most acute pain.

(To be Continued).

RECENT PROGRESS OF PERITONEAL SURGERY.

A LECTURE DELIVERED SEPT. 23, 1881,
IN CHEMICAL HALL, UNIVERSITY OF
MARYLAND, BEFORE THE CLASS
OF THE UNIVERSITY.

(Specially Reported for the Maryland Med. Journal).

Dr. Sims was enthusiastically welcomed by a large audience composed of medical students and members of the profession of Baltimore, who had been attracted by the public announcement that he would lecture. After an appropriate introduction by Professor Miltenberger, in which the great services rendered to medical science by the lecturer, whom he referred to as the "Father of Gynæcology," received their due recognition and praise, Dr. Sims opened his lecture by a reference to the Great International Congress which had just been held in London, and which was the greatest gathering of medical men ever assembled together. Many subjects of the highest importance were there discussed by men of the greatest renown, assembled from all the civilized countries of the world. Among those to which especial attention was paid, was that of abdominal surgery. After hearing the views of the leading authorities and learning the results that had been achieved in this department of Surgery, we may naturally enquire—Does the recent progress in peritoneal surgery tend to secure for us a better prognosis and treatment of gunshot and other wounds of the abdominal cavity?

Ovariectomy is the parent of peritoneal surgery. The success which was achieved by McDowell, the father of ovariectomy, has not been surpassed until recently by the best operators. In fact nearly all of modern ovariectomy is limited to the last ten years.

The lecturer laid down certain principles which should always receive attention in operations involving the peritoneal cavity, viz:

1. Hemorrhage into the peritoneal cavity must be promptly arrested. The means for controlling it are (*a*) pressure, (*b*) the ligature, (*c*) the "hemostatic" or pressure forceps. Several forms of this forceps were exhibited; it acts upon the same principle as the ordinary bull-dog forceps, and is used to compress vessels temporarily during operations. Being much longer than the ordinary artery forceps, it hangs out of the abdominal incision, and there is no danger of its being left in the abdominal cavity as has occurred with the other instrument. The lecturer had seen Péan of Paris operating with 40 or 50 of these instruments hanging out of the abdomen.

2. The peritoneal cavity must be thoroughly cleansed out, and the wound must not be closed until all the blood and serum are removed. Keith first taught us the importance of this principle.

3. The abdominal incision, which is usually in the median line—must be properly closed. For a time it was unsettled whether the edges of the peritoneal incision should be united or not. In 1859, T. Spencer Wells performed some experiments upon living animals (the specimens from whom, still preserved in the museum of the Royal College of Surgeons of England, were exhibited at the recent Congress), which seemed to settle the question beyond all doubt in the affirmative. These experiments are abundantly confirmed by clinical experience. If the peritoneal edges (or surfaces) are not united, a raw surface is left inside the peritoneal cavity. Now nature endeavors to guard against this raw surface by uniting with it whatever lies in contact with it. Exposed intestine or omentum may adhere to the inner face of the wound of the abdominal wall. No mischief may result from this union, but if the intestine be convoluted in a certain way, there is a risk of in-

testinal obstruction, &c., resulting.

4. Drainage is next in importance. In general surgery it seems to be the handmaid of Listerism. When the lecturer was about to depart from Paris with the ambulance corps, during the Franco-Prussian war, Chassaignac accompanied him for several miles on foot through the streets of Paris, urging all the way, with much ardor, the importance of drainage in gunshot wounds of the abdominal cavity. The name of this great surgeon had been since overshadowed by others, and he had not received the credit which was due to his original conception. The lecturer had had no opportunity, however, during the short period—one month—of his military service, to put the principle to a practical test, since all the cases of this nature, which came under the lecturer's care, were moribund when first seen.

In general surgery drainage is justly looked upon as more important than antiseptics; why should this not hold equally good of abdominal surgery? In the peritoneum we have a large absorbing surface with which retained fluids are constantly in contact. Moreover, there is no danger in introducing a glass drainage tube into the lower part of the abdominal wound, since nature forms around it a protecting shield. Wells and others consider the tube unnecessary in peritoneal operations on the ground that the antiseptic employed has rendered the fluids harmless, and hence their absorption is of no consequence. In 1868, the lecturer assisted Mr. Wells in a case of ovariectomy in the suburbs of London. The operation had been delayed to the latest moment, and strong and extensive adhesions were found in the lower part of the peritoneum. The wound was closed with the clamp, and the patient did well for thirty-six hours, when she became septicæmic, and bloody serum oozed from the lower edge of the wound. The sutures gave way at the same

point and a quantity of bloody septic fluid was discharged, after which the symptoms of septicæmia disappeared and the patient went on towards recovery. The only danger to be feared from the drainage tube is ventral hernia; how to obviate this risk is a problem yet to be solved. Notwithstanding this, it is better to risk the occurrence of the hernia than the danger of septicæmia.

The lecturer here referred to the abandonment of the clamp by Wells—its most strenuous advocate—and others, and the almost universal adoption of the intra-peritoneal method of treating the pedicle.

The various recent operations in abdominal surgery were then passed in review commencing with—

Total Extirpation of the Uterus. The first cases of this operation (by Storer and Kimball) were accidental; afterwards it was practised with design, and numerous cases are now on record in which the organ has been extirpated for malignant disease. Freund, of Strasburg, proposed a plan for removing the organ through the anterior abdominal walls, which has been put into execution by himself and others, but the results have not proven satisfactory, and relapses were of frequent occurrence. In consequence of these bad results, Czerny, of Heidelberg, adopted the method of removing the organ through the vagina, and of seven cases, four recovered. The vaginal method, which is nearly bloodless, has been done in this country successfully by Drs. Cole, Lane and Cushing, all of San Francisco.

The method of Péan, of Paris, and called by him "morcellement," was described in detail. It consists of transfixing successive portions of the organ with needles placed at right angles, applying ligatures beneath these, and removing the isolated portions of tissue. By successive operations the whole organ is thus disposed of. But this method is tedious, and the

lecturer did not approve of it.

The late Dr. Wright of Cincinnati had introduced important modifications into this operation and had met with some success in it.

The lecturer here insisted again on the importance of leaving no raw surfaces in the peritoneal cavity.

De Zwaan, of the Hague, proposed at the International Congress a method of operating which is a great improvement on Péan's. It occupies only about one-third as much time as the latter, besides being much more simple and easy of execution. He proposes that the abdominal incision be made large enough to remove the organ at once, even if it be necessary for it to extend from the ensiform cartilage to the symphysis pubis.

Batley's Operation for Intramural Uterine Fibroids is justifiable when life is threatened by reason of excessive hemorrhage, but is not to be undertaken in this connection except to save life.

Extirpation of an Enlarged Spleen has been effected several times. In a case, in the hands of Mr. Spencer Wells, the organ weighed ten pounds, and three pounds of blood were removed from the peritoneum.

Extirpation of a Floating or Diseased Kidney was next considered. It has been executed both from the front and back; the former method is justifiable when the latter is impracticable. A cardinal point to be borne in mind is never to remove a kidney when the other organ is diseased. Czerny's interesting paper before the International Congress was alluded to. Lawson Tait leads in opening new fields for this operation.

Cholecystotomy. The lecturer referred to his own case, in which the gall-bladder was opened by abdominal section and sixty gall-stones extracted. The patient died of black-vomit, due to disintegration of the blood. The *post-mortem* showed no evidence of peritonitis or other inflammatory action. Lawson

Tait afterwards performed the same operation with success. The lecturer did not doubt that the time would soon come when we would be as ready to operate for the removal of gall-stones as for ovarian tumor.

Hydatids of the Liver and Peritoneum have been drained and excised successfully.

Wounds of the Bladder. This organ may be ruptured by injuries inflicted upon the lower part of the abdomen, as by the gore of a bull, etc. In such cases it is good surgery to open the abdomen at once, pare the edges of the rent and unite them by suture. The success of the operation depends as shown by Fischer, of Buda-Pesth, upon the accuracy with which the sutures are placed. The organ is sometimes wounded accidentally during operations; such an accident occurred in the practice of the late Dr. Atlee, and the same thing occurred to the lecturer in the removal of an enormous fibroid tumor of the uterus, which proved fatal from hemorrhage. Dr. Thomas found it necessary to cut into the bladder in the course of an operation; he united the edges of the incision by silk sutures, and no unpleasant result ensued.

Batley's Operation for Determining the Menopause, it was predicted, would be as lasting as McDowell's. Its enemies are deserting their ranks every day. It is more difficult than ovariectomy, and the parts have not been rendered favorable for operation by stretching, as in the latter case. It is often difficult to find the ovaries and bring them into view. To obviate this, the lecturer proposed to introduce his uterine retractor into the cavity of the uterus, and antevert the organ, so as to protrude forwards into the abdominal incision; then by rotating the handle of the instrument to the patient's right side, the left ovary is drawn to the front, and, on reversing this movement, the opposite ovary becomes accessible. Thomas Savage,

of Birmingham, has performed Battey's operation for various causes 30 times without a death, and Lawson Tait forty-four times with only two deaths. Hegar is prominently identified in connection with the operation in Germany. The operation is no longer on its trial abroad. Battey insists upon extreme care in its performance, and in leaving no portion of the ovarian stroma behind. Tait removes the Fallopian tubes with the ovaries.

Excision of the Pylorus has been done several times recently, chiefly by Billroth, but as all his patients have died, we can only admire the audacity, whilst we deplore the uselessness of the operation. To have attempted it only shows what surgeons now dare to do.

Cæsarean Section has of late been going out of fashion, but there is no reason why it should not again come into vogue, and, with the adoption of modern improvements in the mode of operating, prove successful. Porro's method is a decided improvement on the old plan, and has this advantage—that the patient is rendered incapable of further impregnation.

Laparotomy next received a brief allusion.

Lumbar Colotomy, for malignant disease of the rectum and lower bowel, was considered justifiable, since it is capable of prolonging the patient's life.

Fistulas between the Bladder and Rectum are now capable of being cured.

Artificial Anus can now be made with safety and certainty, the bowel being stitched to the abdominal parietes at almost any point which best suits our convenience.

Rupture of the Fallopian Tube, with Hemorrhage from Fallopian Pregnancy.—The suddenness of the occurrence of pain, prostration and collapse, with the discovery of extravasated blood in the pelvic cavity, are

the chief diagnostic points. Nothing will save the patient here but immediate abdominal section. The lecturer illustrated the importance of an early diagnosis in this condition and immediate resort to operation, as proposed years ago by Stephen Rogers, of New York, by reference to a case to which he had been called in consultation, but owing to the lateness of the period, he was unable to satisfy himself as to the diagnosis, and the patient died. Had the case been seen earlier, life might have been saved.

In reviewing the rapid progress of peritoneal surgery during the last few years, the lecturer asked, "Can we afford now to stand still after having accomplished so much?" As with men bent on acquiring fortunes, so with us—the more we acquire the more we want. There is a great wilderness yet before us, and we only need a few brave explorers, like Lawson Tait, to achieve still greater conquests over this unknown world.

The lecturer said his attention was first attracted to the importance of drainage in peritoneal surgery by witnessing a fatal case of ovariectomy in the hands of Nélaton. On *post-mortem* examination, there were no evidences of peritonitis, but a quantity of stinking fluid was found in the peritoneal cavity. He asked himself why could not this patient have recovered if this fluid had been removed? The importance of this idea had grown upon him with reflection. He illustrated its applicability by a number of cases, which he cited. He graphically described the death of Professor George McClellan, of Philadelphia, who, at the age of fifty, and when in the most robust health, was suddenly attacked on the street with perforation of the bowels, and died in sixteen hours of collapse.

He then referred to cases of a similar nature occurring at Cooper's Well, a health resort in the South. In seven of these cases he made *post*

mortem examinations, and found that they had all died of septicæmia and shock. He next spoke of the case of Richardson, of New York, who was shot through the abdomen, and died in five days and a-half. His abdominal and pelvic cavities contained 32 ounces of fluid. "Jim" Fiske died eighteen hours after the receipt of a gunshot wound of the abdomen, of shock and septicæmia. From four to six ounces of serum were found in his pelvic cavity. There was serum in the peritoneal cavities of all the similar cases which came under his care during his one month's experience with the armies in France. These and other similar cases teach that fatal wounds of the abdominal cavity generally pursue a common course, from whatever cause occurring, and that peritonitis is rare. They also teach that the abdomen must be opened immediately, if we would save our patients. If seen at night don't wait until morning, but operate at once; provide a means of exit for the pent-up fluids and the patient is saved. A life may thus be snatched from the very jaws of death.

The lecturer next discussed the relative fatality of gunshot penetrating wounds situated above and below the brim of the pelvis. Of the cases of the former which had come under his observation (seven *post mortems* in all) all died with septicæmia; on the other hand three others, shot directly through the pelvis, recovered without the development of any constitutional symptoms, notwithstanding wounds of bowel and peritoneum. Von Nussbaum has also seen cases get well after similar wounds involving the bladder and rectum. The lecturer had collected eleven cases of gunshot wounds through the pelvis, occurring in his own experience and in that of Drs. Pallen and Gardner, all of which recovered.

Recovery from wounds above the brim of the pelvis appears thus to be the exception, whilst the reverse is true of those below the brim. The difference is to be attributed to the relative freedom with which drainage can be effected, this being accomplished with ease in the latter case, with difficulty in the former where the fluid drops down into the bottom of the peritoneal cavity and there accumulates. A case occurring under the care of Dr. Pallen, during the late war, was cited in which a large part of the abdominal wall was shot away and the bowels poured out upon the ground; they were cleansed and returned, the wound sewed up with twine (the only thing accessible at the time), and the patient recovered, and is still living. Newell had a case in which the contents of a shot-gun entered the abdomen two inches below the sternum; about a half a tumbler of shot, clothing, &c., was extracted from the wound, free drainage was thereby secured and the patient recovered.

The case of Hon. Mr. Vallandigham, who shot himself accidentally in the abdomen, whilst illustrating before a jury the mode in which a similar wound had been inflicted upon another, was quoted as a striking illustration of the need of immediate operative interference in some cases. The lecturer declared that—shock or no shock—he would have cut into his abdomen and secured the bleeding vessel from which the fatal hemorrhage came. So far Dr. McGuire, of Richmond, was the only one who had had the courage to avow similar sentiments; he had seen four cases, in all of which, without any wound of the bowel, bloody fluid was found in the peritoneal cavity. The lecturer had always previously been under the impression that this bloody effusion could only occur after a wound of the bowel.

THE CASE OF THE LATE PRESIDENT.

The lecturer then discussed at some length the medical aspects of the case of President Garfield. The views which he had expressed in Paris, when the news was received of the shooting, had been telegraphed to America, and met with much adverse criticism; this determined him to bring the whole subject before the profession. What he had said, and what he still maintained, was that if the President had recovered from the shock, and if there was undoubted evidence that the ball had traversed the peritoneal cavity, he would have cut into the abdomen, sutured the intestines, if needed, tied bleeding vessels, cleansed thoroughly the peritoneal cavity and inserted a drainage tube. The recent records of abdominal surgery, above quoted, show with what impunity we can and do penetrate the abdomen and not only justify but render imperative such interference. When the President was still alive at the end of three days, he knew that the ball had not penetrated the peritoneum, and hence that his advice had been unnecessary. The case was one of flesh and bone injury quite as much as if the ball had entered the thigh and broken the femur.

In 1873 the lecturer had first published his opinion that death after gunshot wounds was generally due to septicæmia and not to peritonitis, as was and is still believed by many. The opinion had attracted little attention, only one person (McGuire) sharing it, and he not being able as yet to adduce a case in which the opinion was carried to its legitimate conclusion, viz: abdominal section, &c., with free drainage. There was no more danger, the lecturer declared, of a person dying from a gunshot or other wound of the peritoneal cavity than from ovariectomy, and by the application of the same principles to the management of the former case,

as we are in the habit of applying in the treatment of the latter, there is no reason why we should not obtain similar results.

These views were based, he said, not upon theory or speculation, but upon well known and well recognized principles. He did not expect them to be accepted at once, but he desired to hear them freely discussed by those who had had large experience in military practice, a field in which his own was so very limited.

In conclusion he formulated his views into the following propositions:

1st.—Wounds involving the peritoneum have a common course to run no matter how caused.

2d.—If fatal, the result is commonly due to septicæmia.

3d.—This septicæmia results from the absorption of septic fluids within the peritoneal cavity.

4th.—Gunshot wounds of the pelvic cavity generally terminate favorably.

5th.—Gunshot wounds of the abdominal cavity generally terminate fatally.

6th.—Gunshot wounds of the peritoneum generally die from want of drainage.

7th.—To secure this drainage it is necessary to open the abdominal cavity without delay, cleanse out the peritoneum, tie bleeding vessels, sew up wounded intestines, using a drainage tube or not, *p. r. n.* If the other points in the operation be well attended to the drainage tube may be unnecessary.

CLINICAL REPORTS.

A CASE OF BLIGHTED OVUM WITH FLESHY DEGENERATION OF THE MEMBRANES. By Randolph Winslow, M. D. Reported to Section on Obstetrics and Gynecology, Medical and Chirurgical Faculty of Maryland. Sometime during the summer I was consulted by Mrs. Y., in regard to pregnancy. Her history

was as follows: Is 27 years of age, and has had two children, the youngest being three and a half years old. Her menses were regular until five months ago, when they ceased entirely. She supposed herself to be pregnant, and had some of the symptoms of early pregnancy, nausea, &c. After about two months the nausea disappeared, but she had considerable headache and a feeling of malaise, which she thought was of greater severity at the latter portion of each month. About this time also, a dark brown fluid passed constantly from the vagina, which was not offensive. On August 9th, I made an examination. The breasts were small and flabby, the nipple was about the size of that of a virgin, the areola not discolored, and the glands in the areola were not enlarged.

The abdomen was not enlarged, and was tympanitic down to the symphysis pubis. She had not detected any foetal motions. The uterus was found to be somewhat enlarged and anteverted by bimanual examination. Upon introducing a speculum, the vaginal mucous membrane was found to be rather more violet than pink, but not characteristically so, and the cervix and os were somewhat inflamed. Having satisfied myself that she was not pregnant, I cautiously introduced an uterine probe, which passed easily and painlessly, but was followed by a few drops of blood. I expressed the opinion that she was not pregnant. On August 10th I was summoned to see her, and found her having very severe expulsive pains. Upon introducing my finger into the vagina, I was much chagrined to find a mass protruding from the os. This was removed the next day, and proved to be a blighted ovum enclosed in greatly hypertrophied membranes. The foetus was not more than six weeks in development and not an inch in length.

This woman had evidently been impregnated five months previously, and the pregnancy progressed normally about six weeks, when for some reason the foetus perished, whilst the membranes continued to grow. The brown discharge, which had existed during the last three months, was due to the gradual separa-

tion of the membranes from the uterus. The uterine probe did not rupture the bag of membranes, and the little foetus was found floating in a brown liquor amnii. It is rather remarkable that though it had been so long dead yet it was not at all disintegrated. Although I do not hesitate to say I was entirely mistaken in my diagnosis, I am fortunate in having made an error which proved of much benefit to my patient, for whilst nature would undoubtedly have extruded the mass eventually yet the introduction of the probe was the immediate cause of the abortion, an event which was much to be desired under the circumstances. An almost exact representation of the appearance of the foetus and membranes in my case can be found on page 238, fig. 91, in Playfair's System of Midwifery.

A CASE OF TETANUS FROM TOY PISTOL WOUND: RECOVERY WITHOUT SPECIAL TREATMENT. By Dr. H. T. Rennolds, of Baltimore. John Preller, æt. 13 years, shot himself with a toy pistol June 26th, 1881. The wound came out with suppurative discharge on the sixteenth day. Tetanus was first noticed on the twenty-sixth day after the receipt of injury. I first saw him two days after the tetanus had developed. For about ten days previous to this it was noticed that he could not open his mouth as widely as usual. All the flexor muscles were involved; he was stiff from head to heels; the cervical muscles were so rigid as to prevent any motion of the head for about three weeks. On the twenty-eighth day he took calomel and jalap. On the thirty-second day his breath was foetid from accumulated secretions in the mouth, and chlorate potash and elixir gentian were ordered. Finding his mouth more comfortable and the tetanus no worse, and as cases of tetanus almost always died, I continued gentian and glycerine and resolved to use no special treatment for the tetanus, but await developments. In a few days the rigid muscles began slowly to relax, and by the forty-seventh day he had recovered entire freedom of motion and was in good general health and spirits. Complete recovery ensued.

SOCIETY REPORTS.

BALTIMORE ACADEMY OF
MEDICINE.

SESSION 1880-1881.

*(Specially Reported for the Maryland
Medical Journal).*

APPLICATIONS TO ERODED CERVIX DURING PREGNANCY.—*Dr. H. P. C. Wilson* reported the case of a lady who came to him three months ago suffering from hemorrhages due to erosion of the cervix and cervical canal. This was the same patient in whom, one year ago, it was found necessary to induce premature labor at the 7th month, on account of profuse and exhausting hemorrhages which threatened her life. On examination the os was found soft, the cervix patulous and bleeding when touched. Her last menstruation occurred Nov. 2d. *Dr. Wilson* determined to try the effect of local remedies, in order to avoid, if possible, the necessity of artificial delivery, thinking that even if they led to a miscarriage, there was no other alternative of the latter. Accordingly, he began to mop out the cervical canal with chromic acid and Monsel's solution, alternating with iodine. This has been continued once a week for five or six weeks and under it, the erosion has healed, the bleeding has ceased, and the patient is advancing safely to her term. The mop was not passed beyond the internal os. He felt satisfied that he could conduct her safely to term.

OVARIAN TUMOR OR PREGNANCY? OBSCURITY OF DIAGNOSIS.—*Dr. Wilson* also exhibited a specimen of compound multilocular ovarian tumor, from a patient with the following history: She menstruated last Oct. 24th. She vomited incessantly and had excessive nausea. There was a faint mulberry blue color in the mucous membrane of the vagina, and there was evidently a good deal of ascitic fluid present. The diagnosis was obscure and was not settled until the abdomen was cut into, for the purpose of making an exploratory incision. About two gallons of fluid then escaped from the peritoneum. The ovarian tumor was found attached to the broad lig't and uterus. The pedicle was very short.

The blue appearance was not sufficiently marked to be diagnostic; if well-marked it is the most diagnostic sign of pregnancy. The uterine sound would have settled the question if it could have been justifiably used.

LACERATED PERINÆUM.—*Dr. Wilson* reported that he had had three cases of lacerated perinæum in the last three weeks. In the first case, that of a primipara, chloroform was used but no forceps; slight rupture took place whilst the head was being lifted off the perinæum by a finger in the rectum.

In the second case, no chloroform given; there was a good labor. Partial laceration occurred under the same circumstances as before.

The third case was that of a primipara. The cord was wound around the neck three times. Forceps and chloroform were used. The rupture occurred as the perinæum was slipping over the head.

All were brought together with serrefines and made perfect recoveries. *Dr. Wilson* exhibited some serrefines which have been recommended by *Dr. Garriques* in cases of lacerated perinæums, and which he said it was very desirable to have on hand in all cases of labor; that the slightest tear might be promptly closed by them. They are to be left alone until they drop off of themselves—which occurs about the third or fourth day. Even slight ruptures require closure as they may give trouble in after years.

Dr. Williams said, the few cases of rupture of the perinæum which he had witnessed had all come from the shoulders, which cut like a knife. Two cases thus caused necessitated operation.

Dr. Morris held similar views. He never leaves the shoulders to take care of themselves, but delivers them carefully, one at a time.

DIABETES MELLITUS.—*Dr. McSherry's* paper on this subject (previously published in this Journal) gave rise to the following discussion:

Dr. Arnold said, the paper of *Dr. McSherry* abounded in practical suggestions, which were the more welcome since the pathology of Glycosuria is still very obscure. The disease, according to his experience, does not seem to be of frequent occurrence in this latitude, for in a practice of more than thirty

years, he has seen only about a dozen cases. It appears to him that the early stage of diabetes in women is not so easily recognized as in men, on account of the modesty of the former in mentioning the fact of increased diuresis. Symptoms of far less significance than excessive thirst and the discharge of abnormal quantities of urine are apt to obtrude themselves upon the attention of the patients and sometimes acquire a prominence that embarrasses diagnosis. Not long ago he attended a middle-aged woman who had suffered for many months from frequent attacks of gastralgia, which could only be temporarily palliated by large doses of morphia. She complained also of a chronic "pruritus vulvæ" which at once induced him to suspect the existence of diabetes mellitus, and on closer examination, his suspicion proved to be well founded. Directing the diet usually employed in this disease, together with the administration of lactic acid (3 i every 24 hours) not only cured the gastralgia, but also notably diminished the quantity of sugar in the urine. The pruritus however was not relieved. In some of the cases under his treatment he gave a fair trial to large doses of tannic acid, without deriving any benefit from this drug. Lately he has had an opportunity of examining the urine for diabetic sugar in a case of concussion of the brain that was admitted to the City Hospital. The sugar was present in sufficient quantity to render its detection easy by the ordinary tests. It disappeared upon the recovery of the patient.

Dr. McKew had met with several cases. He dwelt upon the inefficacy of treatment. He has derived some benefit from the use of opium and tincture of iron; the latter is capable of diminishing the amount of sugar, and also improving the general condition. If anything permanent is to be accomplished, it is in the early stages; in the latter, only palliation is to be thought of. He objects to the practice of constantly drugging confirmed diabetic patients and depriving them of so many comforts and articles of food, of which they are fond. It is almost impossible to prescribe a diet which is wholly free from matters forming sugar and even if we could, it would not help our patients.

In illustration of the evil resulting from the attempt to coerce the disease, when fully established by diebetic regulations, *Dr. McKew* related the case of a gentleman employed in a very large manufacturing business as general superintendent, and who was very well informed in many branches of natural science. This gentleman was fully aware of the existence of diabetes in his own person for over three years, and knew the sp. gr. and quantity of his urine. He had gotten along very well during all that time without medical advice, and, although feeble, was able to attend to his business. Yielding to the urgent advice of his employers, he consulted a prominent practitioner of the city, who advised a radical change in food and drink. The patient lost his appetite, his stomach revolted at the food offered, and he, in a few days, died of exhaustion. We do wrong in the latter stages to treat our patients so rigorously.

Dr. Uhler had met with several cases, all in men. In one case a gentleman of about thirty-five passed seventeen or eighteen pints of urine daily; his trouble had been pronounced Diabetes Insipidus.

The disease, according to physiologists, is due to increased circulation through the liver, owing to dilatation of the bloodvessels, and ought therefore to be treated by pressure, and if possible the artificial production of jaundice. He thought that bile might have some beneficial effect, and that many of the after effects of the disease are due to coagulation, probably produced by the sugar circulating in the system. He also thought that the benefit derived from exercise is due to increased action of the lungs and heart, and partly to pressure by the diaphragm.

Dr. J. J. Chisolm remarked that the specialist in large ophthalmic practice, probably, saw more cases of diabetes than any other physician. Many cases of diabetes exhibit no special signs that would attract the attention of the general practitioner always to the kidneys, and call for an examination of the urine, but as soon as vision was in any way disturbed the services of the specialist would be called into requisition. In the general impairment of nutrition, induced by dia-

betes, the eye often suffered and cataracts were not uncommon from this cause of impaired health. Such cataracts are usually of rapid formation, involve both eyes and are found in persons between 20 and 40 years of age. Operations for the relief of this form of cataract, owing to the defective state of health, are not so successful as those occurring in otherwise healthy persons. Cataract is usually one of the advanced symptoms of diabetes. In a case of diabetes recently under his treatment, a female aged 37, cataracts developed so rapidly that in a few weeks from good sight the patient had lost all useful vision and required the operation for cataract extraction. An examination of the urine exhibited a copious deposit of sugar. Under the liberal use of the tincture of the muriate of iron, the general condition rapidly improved. The cataract was extracted from the right eye, and six weeks later, from the left. Both eye operations were perfect successes, and good sight was restored to each eye without the occurrence of any inflammation during the surgical treatment of the case.

EDITORIAL.

DR. J. MARION SIMS IN BALTIMORE.
—By invitation, Dr. J. Marion Sims, of New York, delivered an instructive address on the "Recent Progress of Peritoneal Surgery," in the Chemical Hall of the University of Maryland, in this city, on Friday evening, October 7th. The address, over two hours in length, was attentively heard by the students of the University and a large number of medical gentlemen residing in this city. We have taken much trouble to secure a carefully prepared abstract of Dr. Sims' remarks, which will be found in this JOURNAL.

It will be observed that these remarks cover the entire field of peritoneal surgery, and present a comprehensive study of a subject which is now receiving marked attention from surgeons in the old and new world.

After a somewhat lengthy reference to the operation of ovariectomy, which was defined to be the "Mother of Peritoneal Surgery," Dr. Sims spoke of the

recent triumphs in this surgical field and of the successes which were following the removal of tumors and diseased organs from the abdominal cavity. Advanced knowledge has shown that the danger of opening the peritoneal cavity was no longer to be considered. Incisions through the peritoneum were undertaken with great confidence. The mortality following the operations in the peritoneal cavity, Dr. Sims claims, was not the result of peritoneal inflammation but could be traced in nearly every instance to either hæmorrhage, shock or septicæmia: Hence he advocates free drainage and cleanliness in all peritoneal operations. Dr. Sims lays down the doctrine that in gunshot wounds or other injuries to the abdominal viscera it is the duty of the surgeon to incise through the abdominal walls, seek for bleeding or wounded vessels, cleanse the cavity and treat the wounded viscera by open method. This method of treatment was illustrated by a reference to a number of well authenticated cases of gunshot wounds of the peritoneal cavity where death resulted from hæmorrhage or septicæmia—cases in which Dr. Sims is of the opinion recovery would have followed had the cavity been opened, its bleeding vessels tied and contents kept cleansed by proper drainage.

Dr. Sims made a distinction between wounds of the peritoneal cavity above the brim of the pelvis and those in the pelvis. In his experience wounds of the former had been almost invariably fatal. This mortality he attributed to the want of proper drainage, owing to the position of the orifice of the wound and the consequent accumulation of blood and serum low down in the cavity. This fact was used as an argument to favor the opening of the peritoneal cavity for the purposes of cleansing and drainage. The principles which Dr. Sims advocates are not altogether original, but in their application are broader and bolder than the conservative surgery of to-day will be willing to accept. It is fair to say the recent successes of peritoneal surgery would seem to warrant the bold position Dr. Sims has taken. However, more careful distinctions must be drawn in the application of this method ere the pro-

profession will accede to the doctrines advocated by even so high an authority as Dr. Sims.

MEDICAL SOCIETIES OF BALTIMORE.

—Since our last number was issued the Medical Societies in this city have resumed their regular winter sessions. At no time in the history of the profession in this city have more favorable signs of hearty co-operation in medical work been manifested than at present. It is believed the profession is aroused to the importance of contributing its quota to the advancement of medical knowledge and to the fulfillment of the duties and purposes of its calling. The past year noted marked progress in all our medical undertakings, and will be remembered for its contributions to medical advancement and influence. Our medical societies sprang into new life and became the centres of interests from which great benefit accrued to those who took part in their deliberations. We called attention at the time to the rapid growth of membership and to the increased interest these local organizations were exciting in behalf of medical science. The work accomplished by them made a decided impression upon the profession throughout our city, and, in a number of instances, found a generous recognition beyond the limits of our State. It did more towards raising the standard and character of the profession than any five years of work previously done. In point of fact, up to the period last named, but little literary work was done by the profession in Baltimore, and we may number on our fingers the men who contributed to medical periodicals or who prepared articles for medical societies. Society work was of the crudest character, and but few men attended meetings or manifested any interest in what was being done. A corporal's guard was more dignified in its proportions than the society meeting with its scanty quorum. Now the case is altered, and a new régime has been organized. The society meetings are well and often largely attended. The profession has learned to recognize the importance of placing upon record its original observations, and it begins to value the stimulus of the society as a means of incentive and train-

ing. Those who come in contact with society work have felt its influence and, in a number of instances, have recognized the importance of taking part in this work.

During the present winter we hope to see a more decided interest taken in society work by the profession here. We hope to see a large accession of members, more care manifested in the preparation of papers, and in the relation of cases, greater pride shown in debate, and altogether a more wholesome interest felt in the advancement of medical sciences. When men come to the society prepared to contribute something original, useful or valuable to the meeting, and to anxiously inquire after experience and knowledge, then we may hope to see the medical society taking rank as the most valuable school for training and cultivation offered to the profession. To this end let us all lend our efforts during the present season.

LEPROSY IN MARYLAND.—The occurrence of leprosy in a native of Maryland, who has never been beyond the limits of the State, is well calculated to excite serious thought if not apprehension. The history of the disease in places where it prevails endemically gives to this event a very great significance and suggests possibilities in connection with it which concern the health and welfare of our community in the highest degree. Who can say that the seed which has thus taken root in our soil may not there find the elements favorable for its growth and development, as it did in the Sandwich Islands in 1848, and become in time a wide-spread and desolating pest? As for the question of its contagiousness, it cannot be considered as disproved, notwithstanding the report of the Committee of the Royal College of Physicians, appointed by the English Government to investigate the subject in 1867. Popular belief as well as tradition, is strongly in favor of contagion, and in view of the extreme rarity of the disease in this locality, and the fact of previous exposure, Dr. Atkinson's case suggests the great probability, to say the least, of this mode of origin. The discovery of the bacillus lepræ recently by several observers affords corroborative evidence

and should the relationship be established by future observation, will, of course, settle the question. Transmission by heredity is not denied.

The practical point to be decided at this time is, is isolation justifiable? is it demanded?

We unhesitatingly answer in the affirmative and for the following reasons:

1. Because the disease is so repulsive.
2. Because it is almost uniformly fatal.
3. Because there is no known treatment capable of benefiting it.
4. Because its history is one of growth and development.
5. Because isolation has given good results.
6. Because there are good reasons for believing the disease to be contagious.
7. Because it is better that one or two should suffer inconvenience than that a whole community should be subjected to risk of life and health.

WATER SUPPLY OF BALTIMORE.—

The Oriole Festival which continued from October 10th to October 12th, inclusive, was designed with several objects in view. It was intended to celebrate the visit of the French representatives to Yorktown, to bring trade and money to the city, and to mark the introduction of water from the Gunpowder River. The most important of these, in a sanitary point of view, was the last. It was well to signalize it with foaming cascades and fountains dashing their spray high in air, for the magnitude of the work, whose completion was thus announced, is calculated to surprise the modest Baltimorean who accepts without a murmur all the imputations cast upon his city of being far behind all other American cities in enterprise and progress.

The work was begun five years ago. "Loch Raven, the point on the Gunpowder from which the water is taken—about eight miles from the city, was formed by the erection of a stone dam, 300 feet long, of heavy rubble and cut masonry across the falls. The lake thus formed will be 170 feet above tide, and extend up the river five miles. *

From Loch Raven the water is conducted through a tunnel twelve feet in diameter, with a depth below the surface varying from 32 to 356 feet, 36,500 feet long to Lake Montebello. Of this tunnel, 29,625

feet are cut through solid rock, every foot of which had to be blasted out with dynamite. This portion required no arching. The remaining portion (6,875 feet) was through softer material, and is arched with brick. * * The surface elevation of Lake Montebello will be 163 feet above tide, area 80 acres, depth 30 feet, storage capacity, six hundred millions of gallons" (Mayor's message to the City Council, Sept. 26th). It was found necessary, in the course of the work, to provide additional storage facilities on account of the muddy condition of the river so frequent during the year; hence another lake—Lake Clifton—not originally contemplated, with a capacity of two hundred and sixty-five millions of gallons has been constructed. From this last lake the water is brought to the city's edge by six forty inch mains. The whole cost of the work was about \$4,700,000. Baltimore thus becomes possessed of "a system of water-works unequalled in the United States, affording a supply of water nearly double that of the city of New York" (Idem).

It is unnecessary to insist upon the importance of a bountiful supply of good and cheap water to the health of a community. Sufficient prominence has of late been given to the propagation of disease by drinking water, and the agency of filth in the production of a host of affections is well known.

REVIEWS & BOOK NOTICES.

Transactions of the American Gynecological Society. Vol. v. For the year 1880. Boston: Houghton, Mifflin & Co., 1881.

This is a very handsome octavo volume of 470 pages, gotten up very much after the style of similar publications in England. It begins with a list of fourteen Honorary Fellows and the forty-nine Fellows. Then follow the minutes of the fifth annual meeting held in Cincinnati on September 1st, 2nd and 3rd, 1880. The meeting was called to order by the President, Dr. J. Marion Sims, with nineteen Fellows present. The opening address by the President deals

chiefly with matters relating to the organization and working of the society. He strongly urges a more Democratic form of constitution, and proposes to increase the number of Fellows from 60 to 100, with a view ultimately to rendering the membership unlimited, and to do away with the essays required of candidates for Fellowship. The consideration of these and other amendments proposed by the President was deferred until the present year*. The volume contains papers by Drs. Battey, Engelmann, Byford, Jackson, Sutton, Wilson, Howard, Parvin, Eve, Chadwick, Campbell, Richardson, and the one candidate elected to Fellowship, Palmer. It is useless to commend the work of such men, whose names alone are a guarantee of its value. The volume closes with an index of the gynecological and obstetrical literature of all countries for the year 1879.

Lectures on Digestion: An Introduction to the Clinical Study of Diseases of the Digestive Organs. Twelve lectures delivered to practitioners and advanced students of medicine during the winter session 1878-9. By C. A. EWALD, Lecturer in the Royal University of Berlin, &c. Translated by Robert Saundby, M. D., Edin., M. R. C. S., &c. Wm. Wood & Co., New York, 1881. 8vo. Pp. 149.

The author of these admirable lectures has presented in them the subject of the physiology of digestion from the standpoint of the physician and clinician. A notable list of new observations and brilliant discoveries, says the author, have given the subject quite another aspect to that which it possessed fifteen or twenty years ago; he has undertaken to follow its development from the time of

the appearance of the classical works of Tiedemann, Gmelin, Frerichs and Bidder and Schmidt, to the present, and to collect the information upon his subject scattered through a hundred monographs, periodicals and reviews. His special object has been to present the relation of derangements of digestion to our knowledge of the normal processes, and hence chemical formulæ and methods have been ignored as far as possible.

The work is conceived in a thoroughly modern scientific spirit, the style is concise and free from all redundancies, and each page shows evidence of a judicious sifting of a vast amount of material in order to get at what the author has deemed proper to bring before his critical audience.

Landmarks, Medical and Surgical.

By JOHN HOLDEN assisted by James Shuter, M. A., Camb., F. R. C. S. From the third English edition, with additions, by Wm. W. Keen, M. D. Philadelphia: H. C. Lea's Son & Co. 1881. 8vo. Pp. 148.

These landmarks were originally published in St. Bartholomew's Hospital Reports. The third English edition appeared during the spring of the present year, and now within three months we have this American edition with the notes of Prof. Keen added. Nothing more is needed to show the great popularity of the work, which deals with a subject of the highest practical importance, but hitherto strangely neglected. Prof. Keen's additions are of the highest value. He has long maintained that the living model is as essential in teaching anatomy as the cadaver or skeleton, a method which he terms "clinical anatomy." The method is not a new one, so far as oral instruction is concerned, but that it has not received the prominence it deserves, we think the experience of each one of us will demonstrate; and this is, we believe, the first systematic presentation of it in print,

* We learn that the propositions of Dr. Sims did not meet with much favor at the recent meeting in New York.

Chemical Analysis of the Urine. By EDGAR F. SMITH, Ph. D., and JOHN MARSHALL, M. D., with Illustrations. Presley & Blakiston. Philadelphia: 1881. 8vo. Pp. 104.

This little work is designed to deal more with the chemical side of the subject than works of a similar sort have hitherto done. A section is added on the microscopic examination of urinary sediments. The illustrations consist of plates showing the microscopic appearances of various urinary constituents, and of apparatus for the estimation of urea by the hypobromite method.

MISCELLANY.

MANAGEMENT OF HYSTERIA.—But by removal from the influence of friends sympathizing too deeply; by providing a skilled nurse; by firmly, yet kindly teaching the patient lessons of endurance; by breaking up settled habits of invalidism; by improving nutrition by due attention to the condition of the alimentary canal; by simple, though good feeding; by careful massage; by securing an abundance of sleep; by the use of light sedatives, and if needed, of anodynes, and the cautious use of tonics; by daily exposure to fresh air and sunlight; by keeping the patient from exciting company; by due attention to local disorders that may happen to complicate cases; by such means are cases of the kind now under consideration to be slowly, but, as a rule, certainly benefited.—*Jewell, Holmes's System of Surgery.*

GASTRIC FERMENTATIONS.—I had the opportunity of observing a case in which, as the patient very pithily observed, "there was sometimes a vinegar factory and sometimes a gas-works in his insides." In the one case the alcoholic fermentation led to the formation of acetic acid, in the other the butyric fermentation pro-

duced hydrogen and carbonic acid. This patient was specially remarkable, as he at times belched higher hydro-carbons, such as Marsh gas and (perhaps) Olefiant gas, which took fire when a light was held in front of him and burnt with a faintly luminous flame. The man died, and not a dilated stomach, but a flat scirrhus tumor of the pylorus, causing decided stricture of the orifice, was found.—*Lectures on Digestion, Ewald.*

NORTHWESTERN LANCET.—This is the title of a new semi-monthly journal, the first number of which appeared on the 1st inst. It is located at St. Paul, Minnesota, and its avowed aim is to give voice to the work of the profession of the "new northwest—a territory equal in extent to one-half of the organized States, and rapidly peopling with the representatives of every nationality." The salutatory is well written and displays considerable literary ability. Jay Owens, M.D., is editor and publisher.

RECENT ADVANCES IN THE SURGICAL TREATMENT OF INTRA-PERITONEAL TUMORS.—Excision of the whole uterus affected with cancer has been repeatedly accomplished, and Porro's operation is taking the place of the Cæsarean section. The removal of an enlarged spleen has now been effected in a sufficient number of cases to prove that it is more than a surgical possibility. Not only have cysts of the kidneys been cured by drainage and renal calculi been removed, but the displaced, enlarged, or diseased kidney has been extirpated; gall-stones have been removed from the gall bladder; suppurating hydatid cysts of the liver have been drained; peritoneal hydatid tumors have been excised; and within the past few weeks authentic reports have reached us of excisions of portions of the stomach, and of recovery after the removal of more than six feet of the small intestine. This has followed

excision of smaller portions of intestine during ovariectomy; and a bolder course has been taken of late years in cases of obstructed intestine, of wounds or rupture of the bladder and of extra-uterine foetation.—*T. Spencer Wells, Int. Med. Congress.*

LAWSON TAIT ON RECENT ADVANCES IN ABDOMINAL SURGERY.—Lawson Tait attributed the recent advances in Abdominal Surgery to the great successes of ovariectomists; the brilliant results being due to improved general treatment, the discontinuance of the clamp, and the perfection of the intra-peritoneal method of operating. As to Listerian precautions, he found them highly unsatisfactory, the employment of carbolic acid rather impeding recovery. He had operated in one case of impacted gall-stone, five of hydatid tumor of the liver, one of large cyst of the liver, six of cysts of the kidney, one of abscess of the spleen, twelve of abscess of the pelvis (a form of disease which may be treated with very good results by operative interference of the kind under discussion), four of suppuration of the Fallopian tube, and six of tubal pregnancy, one mother dying (the only fatal case out of the thirty-six), but the child still lives. In twenty-two cases he had removed the uterine appendages for the arrest of hemorrhage due to fibromyoma, with but two deaths; the cases that recovered are all cured except one which proved to be malignant.—*Int. Med. Cong., Brit. Med. Jour., Oct. 1.*

NEVER in a single instance have I seen quinine *excite* uterine contractions in utero-gestation. When, however, at full term the pains are feeble and inefficient, presaging a tedious and exhausting labor, quinine in ten or fifteen grain doses certainly does in a marked manner increase the energy of the uterine contractions. And in

relaxed conditions of the uterus after the labor is over it tones up the organ and thus tends to prevent post-partum hemorrhage. So also when the lochial discharge is abnormally copious and exhausting, I prefer it to ergot in its power to stimulate the weeping uterine vessels.—*Prof. W. T. Howard, Gynecological Transactions.*

BATTEY'S OPERATION.—Of the cases (his own and others) tabulated by the author as complete operations, there were cured 68, or 75 p. c. Of the incomplete operations there were cured 3, or 18 p. c.; greatly benefitted 7, or 41 p. c.; not benefitted 7, or 41 p. c. In several instances where the results were unsatisfactory for some months (or even a year or more) the patients were subsequently much improved, and a few were even completely cured. It was premature to set down any case as a failure until ample time had been allowed for the cyclical change to become complete.—*Batley, Int Med. Congress.*

CEREBRAL LOCALIZATION.—Experimental physiology and clinical observation agree that there exists on the periphery of the hemisphere a motor zone, embracing the posterior part of the frontal lobe and the anterior part of the parietal lobe. At the same time it may be considered an established fact that electrical or pathological excitation of this zone engenders contractions of the muscles of the opposite side of the body, while destructive lesions, involving this zone, produce motor paralysis of the same muscles. But this is as far as we can legitimately go, for in the present state of our knowledge it is impossible for us to deduce from the seat of the paralysis the exact situation of the cortical lesion.—*Hammond.*

SURGERY BEFORE AND SINCE THE INTRODUCTION OF THE ANTISEPTIC METHOD COMPARED.—And if we compare our former with our present re-

sults, we find a difference like that between day and night, the feeling of a great victory after long and severe defeat; and never do I feel more solemnly and gratefully inclined to Providence, who has permitted me to live to see this blessed change, than when I make this comparison.

Professor Nussbaum has drawn this comparison between then and now in his clinic in clear traits, and with manly candor; he has shown that for forty years under his own direction, as well as under that of his predecessors, among whom was Stromeyer, fatal wound-diseases raged, that nearly all patients with complicated fractures died of them, and that even those with the slightest injuries often succumbed to them; that erysipelas and abscess were matters of daily occurrence; that during the latter years hospital gangrene also appeared and attacked the dreadful number of eighty per cent. of all wounds and sores; that he stood helpless and powerless before all these conditions, and that at one step, after the general introduction of the antiseptic method all this ceased, and instead of that, even after great operations, healing by first intention was introduced as an entirely new result.—*Volkman, Int. Med. Congress.*

SOCIETY BULLETIN.—*Academy of Medicine* will meet Tuesday, November 1st, at 8. 30 P. M.

Clinical Society will meet Friday, October 21st, at 8 P. M. Dr. J. W. Chambers will read a paper on "Nerve Stretching in Locomotor Ataxy,"

Medical Association will meet Monday, October 24th, at 8 P. M. Dr. Joseph T. Smith will read a paper on "Physical Education."

Section on Obstetrics, Med. and Chir. Fac. of Md. will meet Friday, October 28th, at 8.15 P. M.

Med. and Surg. Society meets every Wednesday at 8.30 P. M.

MEDICAL ITEMS.

It is reported that an American System of Medicine is in contemplation under the editorial management of Prof. Pepper, of Philadelphia, and that several prominent Baltimore professors have been asked to contribute articles to it.—The first session of the "Baltimore Medical College" opened on the 4th inst. with an introductory address by Rev. Dr. Grammer. —Dr. Sydney O. Heiskell, a recent graduate of the College of Physicians and Surgeons, has been appointed Assistant Resident Physician at Spring Grove Asylum (Maryland Hospital for the Insane).—Dr. Lawson Tait lays down "the axiom, that when we find in the abdomen or in the pelvis such a condition as renders the patient's life a burden to her, our rule ought to be to open the abdomen and see what we can do."—Training schools for nurses are about to be established in Cincinnati, New Orleans and Detroit.—Dr. A. M. Fauntleroy, Superintendent of the Western Lunatic Asylum, Staunton, Va., has accepted the invitation to deliver the oration at the annual meeting of the Medical and Chirurgical Faculty of Maryland next April.—*Deaths.*—Prof. James P. White, of the University of Buffalo, died Sept. 28th, æt. 71. Dr. Arthur Pue died recently in Harford County, Md., æt. 77. Dr. John E. Crowe, Professor of Obstetrics, Louisville Medical College, died suddenly Sept. 27th. Dr. John A. Conner died in this city Sept. 26th, aged 46.—Dr. James E. Lindsay has been elected Professor of Chemistry in the Baltimore College of Dental Surgery, to fill the vacancy created by the death of Dr. E. Lloyd Howard.—The first successful ovariectomy done in South America was recently performed by a surgeon of Caraccas.—Professor Czerny, of Heidelberg, reports a successful case of excision of the pylorus.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

STRETCHING OF THE SCIATIC NERVE IN LOCOMOTOR ATAXIA.

BY J. W. CHAMBERS, M. D.,

Demonstrator of Anatomy, College of Physicians and Surgeons.

(Read before the Clinical Society of Maryland, October 21st, 1881).

Nerve-stretching was done for the first time by that great leader in surgery, Billroth, in 1869. The operation seems to have been done inadvertently. The case was that of a man who had received a severe contusion of the sciatic, which was followed by severe pains and epileptic convulsions. The nerve was cut down upon for the purpose of performing exsection if found diseased; with this view the nerve was raised out of its sheath and in this way was moderately stretched. As there was no apparent disease, the wound was again closed without section of the nerve. The symptoms were entirely relieved for a time, but recurred with all of their former severity in two

weeks. The nerve was again stretched with complete cessation of all of the symptoms which had not again recurred twelve years after the operation.

The original account of Billroth's case has not been accessible to me, but from the abstracts which I have seen, I gather that the operation was first done unintentionally but after the recurrence of the symptoms with a full appreciation of the probable results.

Nussbaum, in 1872, after also noticing the cessation of the tonic contraction of the muscles of the forearm after the accidental stretching of the ulnar nerve, performed the operation of nerve-stretching intentionally, for the first time, for painful tonic contractions of the muscles.

In the nine years since the publication of Nussbaum's case the operation has been done upwards of a hundred and fifty times, for the most various affections — neuralgia, contractions, both tonic and clonic, tetanus, epilepsy and recently even in a case of pemphigus. In nearly all of these affections, the most brilliant successes

have been claimed by some of the operators, while others either express themselves doubtingly or deny altogether the virtues of the new method of treatment. It was probably these brilliant and highly colored results that first suggested to Langenbuch in 1879, the possible therapeutic value of nerve-stretching for the excruciating pains of locomotor ataxia, since all of the remedies hitherto employed in this disease had been inert and devoid of any practical value, and in fact exerted little or no influence whatever toward the mitigation of the most unbearable symptoms.

Langenbuch, of Berlin, in 1879, was the first one to stretch a nerve for locomotor ataxia, since which time he has reported six cases of tabes improved or cured after stretching the nerves. Other cases have been reported by Esmarch, Erlenmeyer, Sury-Bienz, Langenbeck, Mueller and Ebner, Debove, Schuessler, Hammond, and Fenger of Chicago, who was the first to perform the operation under discussion in this country, December 28th, 1880. In the majority of the cases reported there has been either amelioration or entire disappearance of some or all of the symptoms.

I have now but to report my own observations, which are based upon one case:

Patrick Connolly, age 53, night-watchman in a large institution, was moderately nourished; had suffered for three years with rheumatic pains in the lower extremities appearing in paroxysms of short duration, some times lasting for half an hour. The crises gastriques of Charcot were well marked and gave rise to much inconvenience. There was paroxysmal cardialgia, with nausea at times. Since January, 1881, the lancinating pains had been increasing in severity so as to interfere seriously with sleep. The pains were most violent in the left leg and thigh on the posterior surface. These pains continued with

but little or no interruption. There were irritation of the genito urinary organs, frequent and painful micturition with voluptuous sensations. Pronounced lassitude in the lower extremities; upper extremities not appreciably affected. Ataxia well marked; could not walk in the dark with any degree of safety; walked with great difficulty over uneven places. Was unable to navigate at all with eyes closed. With eyes closed and the feet brought close together he could stand, but swayed and oscillated, and the standing at all in point of time was limited. Visual powers were much impaired, could read only with the best of light and then with pain and great discomfort; diplopia marked. Pupils reacted to light and atropia but sluggishly. Slight myosis of right eye. Patellar reflex entirely wanting. Plantar reflex scarcely if at all noticeable. Skin reflex had disappeared so that the sensibility to tickling in the bottoms of the feet was altogether absent.

Sensibility over both legs and thighs was seriously impaired, more marked in the former. Pressure-force (*druckkraft*) was somewhat lessened; he made much to do about the feeling of coldness, formication and numbness in the lower extremities.

Treatment, pursued for six months without the least effect, was internally nitrate of silver, ergot, digitalis, iodide of potassium and the methodical application of electricity.

The double sciatica from which he was suffering was most intense, being rather worse in the left leg; it was clear that something must be done or I should lose my patient, who as he said had not had a night's rest for three weeks. I suggested as the last resort the stretching of the sciatic nerve, to which he readily and kindly consented, and the operation was done June 15th with the assistance of Drs. Branham & Kierle. He was accordingly placed on the operating table and

chloroformed. An incision was made about three and a half inches long over the course of the left sciatic nerve at the junction of the middle with the lower third of the thigh, where the nerve emerges from beneath the biceps muscle. The nerve was very readily exposed and raised with the hooked index finger; the traction made was sufficient to produce flexion of the leg. The nerve was then seized between the finger and thumb and the peripheral end strongly stretched; the central portion was then seized and pulled until the sensation was felt as if something was giving away. The traction was kept up for some time, possibly from one to three minutes. The nerve was then placed back into its sheath. The wound which was dressed antiseptically healed in ten days by granulation. After recovering from chloroform-narcosis, the pains had entirely disappeared, and the patient walked around the room rapidly and well, exclaiming "I feel much better, no pain, stiffness all gone from my knee." He then walked without any pain or difficulty some four squares.

Since the first night after the operation, he has had no pain whatever in either leg. The symptoms were as much relieved in the right leg as in the one operated upon. From the day of operation coördination was much better, and the crises gastriques were greatly relieved; there was no change whatever in either tendon or skin-reflex. The sight has been improved very much by the treatment. Sensation is very much better indeed. The genito-urinary apparatus is functioning normally.

In fact the man has been so much relieved of all of the most troublesome symptoms that he has again gone back to his work, which he had been compelled to abandon since last January.

Relative to the good effects of the operation: There is the very best of clinical evidence at our command

to show that it does give relief to the pains as well as ameliorate the actual ataxic symptoms, not only in the limbs operated upon, but also produces like favorable results on the opposite side of the body; in this we are not altogether surprised since Brown-Sequard, in his experiments on the spinal cord has shown, the spinal cord being intact, that stretching of the sciatic nerve produces hyperæsthesia of both extremities; the spinal cord hemisected, that it produces motor paresis and hyperæsthesia on the side injured,—anæsthesia and preserved motor power on the opposite side. Stretching the sciatic on the anæsthetic side restores the sensibility to this side. The restoration of sensibility, however, is not limited to the area of distribution of the sciatic, but extends over the entire side of the body if the section has been in the cervical region.

Experiments made by Schering, Debove, Laborde, Quincaud and others generally sustain those of Brown-Sequard. These experiments, I take it, militate largely against the theory of Vogt and others, who believe that rupture of the adhesions of the nerves to their sheaths and tearing, stretching or otherwise altering the relation of the vessels to the nerves produce such an alteration of nutrition in the nerves as to account for the effects. This would only explain the effects, however, over the area which is supplied by the nerve stretched.

To my mind the theory of the dynamic action of the operation better accords with the clinical facts and most readily explains the effects produced.

According to Dr. Foot, of Dublin, there is nothing more than a little dexterity required to pass a catheter (say 10) into the larynx, a treatment which is now meeting with favor in oedema glottidis and croup.

A HISTORICAL STUDY OF THE INVENTION AND PUB- LICATION OF THE ENG- LISH MIDWIFERY FORCEPS.

BY J. R. QUINAN, M. D., BALTIMORE, MD.

While all familiar with the singular circumstances surrounding the history of the forceps—the glory of the invention, the shame of its concealment, and the fortunate accident that gave us, long after the inventor's death, his original instruments in their different stages of improvement—will admit that the story still retains sufficient interest to justify its repetition, yet such is not the chief object of this paper, but rather to call attention to the considerations that have led me to question the correctness of the generally received opinion that to Edmund Chapman is due the honor of having *first* published this triumph of the obstetric art to the world.

The importance of the invention of the forceps, both to the profession and to humanity at large, can hardly be exaggerated. Before the 17th century, when Chamberlen's genius gave us this life-saving instrument, the most skilfull accoucheur in a case of difficult labor from impacted head, was he who could most dexterously destroy the child and remove its '*dissecta membra*.' To convince ourselves of this we have only to consult the dusty tomes of Celsus,* Paulus Aegineta,† Avicenna,‡ Albucasis,§ Reynald,|| Paré,¶ Mauriceau° and

* Lib. vii, Cap. xxix.

† Lib. iii, Cap. lxxvi.

‡ Canon Medicinæ, Venetu, apud Juntas, 562, Lib. iii.

§ De Chirurgica, Arabice et Latine, cur. J. Canning, Oxonii, 1778.

|| Birth of Mankynde, or otherwise named the Woman's Book, 1565.

¶ Works of Amb. Pare, translated by T. Johnson. London, 1678.

° Traite des Maladies des Femmes Grosses et de celles qui sont nouvellement accouches, Paris, 1668.

Deventer,* all of whom treat more or less largely of the means and modes of extracting a dead fetus, but none of delivering it alive. We are told, indeed, that Rueffe† speaks of a forceps without teeth, "*quâ dentes eruuntur*," for the delivery of living children, but his words evidently imply that it was merely a suggestion, "*ut si possibile sit, id quod protrahendum est educat facilliter*;" besides, the figure of the instrument he proposes is furnished with a fixed joint, and its introduction and application to the fœtal head were, therefore, impracticable. No; the problem of devising an instrument that would, as it were, lengthen the hands of the operator, so as to enable him to grasp the head and extract it with safety to mother and child, had doubtless engaged the study of Greek and Roman, Gaul, German and Saxon, for centuries, without finding a solution, till Paul Chamberlen's sagacity furnished it. The exact date of his discovery is not known, but, according to Churchill,‡ it must have been before 1647.

The Chamberlens, Chamberlains, or Chamberlaynes (for the name is differently spelled) seem to have been a family of physicians, the members of which were severally medical attendants of James I, Charles I, Charles II, James II and Queen Anne; though the names immediately connected with the invention and use of the forceps were Paul Chamberlen, the father, and his sons, Peter, Hugh, and a third son whose name is not mentioned, but whom I venture to conjecture was Edward (see History Royal Society, 1685).

Of Paul Chamberlen little is known beyond his being credited with the invention of the forceps, and his

* Henrici a Deventer Operationes Chir. novum lumen exhibentes Obstetricantibus. Leyd. 1701.

† De Conceptu et Generatione hominis. Tiguri, 1554.

‡ Mid. ed. by Condie. p. 313.

having published a work entitled "A Philosophical Essay on the Celebrated Anodyne Necklace." London, 1717.

Peter Chamberlen was the author of "A Voice in Rhama," 1647; "Theological and Political Works," 1678-82; "Medicine for the Poor," London, 1649. He was probably a medical attendant of Charles I, as we find that the Czar of Russia wrote under his own hand to Charles to allow Dr. Peter Chamberlen to take up his residence at St. Petersburg. Great preparations, it is said, were made for the voyage, but at the last moment the king declined to let him leave England, on the ground that a Dr. Elmston, a native Russian, had been studying medicine in England and could supply Dr. Chamberlen's place.*

Hugh Chamberlen was born 16—; A. M. Trin. Coll., Camb., 16—; M. D., 16—; F. R. S. 1681; Phys. in ordinary to Charles II; died 1728. His works are: "Practice of Physic," "Midwives' Practice," Lond., Transl. of Mauriceau's Mid. ('Traite des Femmes, &c.') 1672; "Queries Relative to Practice of Physic," 1694, "Papers Relating to a Bank of Credit Upon Land Security," 1692, and other works on same subject 1698-1700. He is also credited by no less an authority than Haller,† with the invention of the forceps; but this, if we are to accept the statement of his brother, Peter Chamberlen, is evidently a mistake.‡

In 1670 Hugh Chamberlen visited Paris for the purpose, we are told, of selling the 'secret' to the French Government, to which he offered it for 10,000 crowns. But ignorant apparently of the range of application of his forceps, he rashly undertook to effect delivery with it in 'half a quarter

of an hour' in a case of distorted pelvis, which Mauriceau had previously abandoned as desperate. After exhausting himself in a fruitless effort of three hours, he gave it up in disgust and returned to England without effecting the object of his visit. Before leaving, however, he sought an interview with Mauriceau, to whom he confessed his own mistake, and complimented the French accoucheur on his better judgment in the case, as well as on the superiority of his work on Midwifery, a copy of which he carried home with him and subsequently translated, upon the publication of which, he acquired, says Mauriceau, such reputation in his art that he secured an income of more than £30,000 ("qu'il y a gagne plus de trente mille livres de rente").

In the preface to his translation of Mauriceau (1672) he says, "my father, brothers and myself (though none else in Europe as I know) have by God's blessing and our industry, attained to and long practised a way to deliver women in this case" (impacted head) "without any prejudice to them and their infants. Though all others (being obliged, for want of such an expedient, to use the common way) do, and must endanger, if not destroy one or both with hooks." Further on, he says, "I will now take leave to offer an apology for not publishing the secret I mention we have to extract children without hooks when other artists use them, viz: there being my father and two brothers living that practice this art, I cannot esteem it my own to dispose of, nor publish it without injury to them." As this apology (?) is to be found in the preface to the third edition of 1716, it follows that they had not divulged the secret up to the latter date; so that for at least seventy years, this distinguished club of knaves had for their own pecuniary advantage, kept this life-saving discovery from the public!

*On the Origin and Present State of Medicine in Russia." By Dr. Geo. Lefevre, M. D., Phys. to Brit. Embassy, St. Petersburg. In *Brit. and For. Md. Rev.*, 1, 601.

† Bibliotheca Chirurgica, Tom. II, p. 179.

‡ Vid. Churchill op. cit. 313.

"L'humanite" says a Biographer,* "lui eut ete plus redevable si par une cupidite qu'on ne peut s'empecher de blamer, il n'eut volu tenir secreete une decouverte utile a la vie de ses semblables, mais le 17me siecle ne s'etait point fait d'idees si nettes et si elevees a cet egard;" an excuse which we are not willing to admit; for however corrupt the moral tone of the politicians of that day, it would be difficult to find another example of such sordid avarice and inhumanity among its medical men. The studied effort Hugh Chamberlen makes to apologize for keeping their discovery secret, is itself a confession of conscious guilt and that they knew they were suffering arraignment at the bar of public opinion for their baseness. The meanness was their own, not that of the age. One of their cotemporaries,† practicing their own art, says, in describing the qualifications of an accoucheur: "il doit être *humain et charitable*, surtout envers les pauvres, et *n'agir pas dans son travail pour le lucre et son interest propre*, mais comme dit l'Apôtre, pour l'honneur et la gloire de Dieu et pour conserver sa reputation parmi le monde."

In 1686, Hugh Chamberlen, having espoused the cause of James II, had to fly to Holland and while there, sold the 'secret,' it is said, to Roger Roonhuysen, but it is more generally thought that he disposed of his vectis only, by the use of which the Dutch physicians gained great celebrity, and following the bad example of the Englishmen, monopolized it for their own emolument, until the secret was generously bought for £5,000 by Drs. Visscher and Van der Poll in 1753, who made it public in the Dutch language; which publication was subsequently (1754) rendered into French by M. Paeveille.§ Mûlder,‡ however, says

Chamberlen sold both forceps and lever to the Dutch, but they preferred the latter. Be this as it may, it was done under an injunction of secrecy, and so far as any evidence appears, the Chamberlens never voluntarily made known to the public their important secret, and but for a fortunate accident, we might to this day have been left to conjecture as to its character and the form of the forceps they invented. "The estate of Woodham, Mortimer Hall, near Maldon, Essex, was purchased by Dr. Peter Chamberlen sometime previous to 1683 and continued in the family till about 1715, when it was sold by Hope Chamberlen to Mr. Alexander." In an old chest found in one of the chambers of this house, certain obstetrical instruments were discovered, which were given to Mr. Cansardine and by him presented to the Royal Society of London.* The late Prof. Charles D. Meigs, while in London, (1845) had fac-similes made from the original instruments thus found, and of his drawings† I make the subjoined copies, showing the progressive improvement of the instrument from 1 to 3, when it had attained under Chamberlen's hands its most perfect form, "which has undergone no essential improvement since."‡

We have seen that from some time before 1647 to 1716, the Chamberlens had kept their secret, but soon after the latter date it must have become known to a few. Mr. Drinkwater, surgeon and man-midwife at Brentford, who entered on practice 1686, and was contemporary with the Chamberlens for twenty-five years, left among his effects at his death, in 1728, a pair of forceps, which passed into the possession of Dr. Wallace Johnson,‡ who informs us that, "they were exactly like those of Giffard and Chap-

*Michaud, Biog. Univ. in loco.

†M. Viadele of Paris, 1670.

§Vid Mem. l'Acad. Ch. 1753-4, and Vol. 15, 223: Van Swieten Comment, Vol. xiv, 39, et seq.

‡Hist. Lit. et Crit. Forc. et Vect. p. 88.

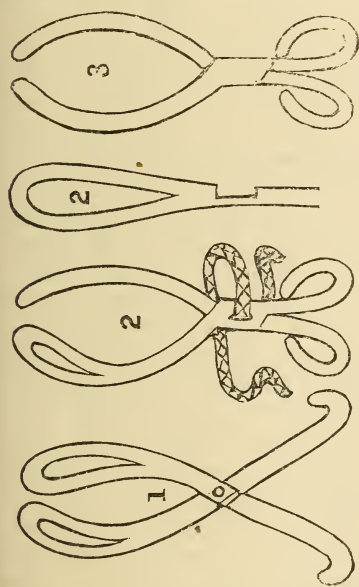
*Med. Chir. Trans., vol. ix, p. 183.

†Obstet., the Sci. and the Art, 530.

‡Lee "Theo. and Pract. Med." 282.

‡Syst. of Mid., 1769, p. 170.

man, except that the hooks of the handles turned outward." John Mawbray, also, in his "Female Physician," published 1724, decries the use of an instrument which he calls an Eductor, employed by certain masters of the art of his time for delivery of living children.* Chapman admits that he had used the instrument since 1726† and Giffard dates his first case of instrumental labor 1728. But the important inquiry arises who is entitled to the honor of having first made the forceps public?



CHAMBERLEN'S FORCEPS.

To this all our text-writers, with scarcely an exception, reply 'Edmund Chapman in 1733.' Thus say Smellie,‡ Denman,§ Lee|| and Meigs.¶ Haller° also says: "Ed. Chapman forcipem Anglicam a Chamberlenio quidem inventam, a Joanno vero Maubrao spretam, *primus, descripsit, depinxit, defendit.*" Parvin in* his

able "Address on Obstetrics," before the International Medical Congress, 1876, endorses the same view, and still more recently, before the same body gathered in London, we have a similar statement from Prof. A. H. McClintock, M. D., L. L. D., in his address on "Obstetric Medicine and Surgery."* He says: "Dr. Edmund Chapman is entitled to our lasting gratitude for having been the *first* to publish to the world a description of that 'noble instrument' (to use his own phrase) the obstetrick forceps." "This he" (Chapman) "did in the 'Edinburgh Medical Essays and Observations,' and subsequently in his treatise on the 'Improvement of Midwifery,' &c. The first edition of the book was out in 1733.' Now, notwithstanding all this formidable array of authorities in support of Chapman's claim to the honor in question, I am compelled from an examination of the facts, to deny it to him altogether. The reference of Dr. McClintock to the 'Edinburgh Medical Essays' is particularly unfortunate, as they not only fail to support his assertion, but, as we shall see, directly contradict it. Chapman is not a contributor to the Medical Essays, either on the forceps or any other subject. The Dr. evidently took his citations at second-hand (possibly from Denman)† without verifying them, a mode in which much of what is called history is manufactured.

Both Chapman's‡ and Giffard's§

* Vid London Lancet, Aug. 6, 1881, p. 229.

† Op. Cit. introduction.

‡ An Essay on the improvement of Midwifery chiefly with regard to the Operation, to which is added 50 select cases by Edmund Chapman, Surg. Printed for Messrs. Bettesworth & Hitch, London, 1733.

§ Cases in midwifery written by the late Mr. William Giffard, Surgeon and Man-Midwife. Revised and published by Edward Hody, M. D. and F. R. S., 1733 (See Gent. Mag., vol. iii, 1733, p. 667, where it appears in the book-list for December, 1733). A copy in the Bost. Med. Lib. kindly examined for me by Dr. Ed. A. Brigham, Lib. has the year 1734,

* Op. Cit., p. 276.

† Churchill Op. Cit., 315.

‡ Op. Cit. introd., xlv.

§ Mid. introd.

|| Op. Cit., p. 282.

¶ Op. Cit., 532.

° Bibliotheca Chir., i, 179.

* Trans. Internat. Med. Cong., 1876, p. 139.

works were published in 1733, and are noticed and reviewed in volume iii, *Edinburgh Medical Essays* for the same year, but the only paper in this volume on the forceps is one by Mr. Butter, on the forceps of M. Dusé, of Paris, with a cut, a copy of which we append. This instrument is evidently constructed after that of Palfin (1722) and bears little or no resemblance to the Chamberlen forceps, a circum-



DUSE'S FORCEPS.

Fig. in *Edinburgh Essays*, iii, 1773.

stance which the editor of the *Medical Essays* notices in his review of Giffard's work,* by saying, "he" (Giffard) "made use of an extractor which is so far different from that described in Art. xx of this volume, that the blades of it consisted each of an oval ring" (fenestra) "bended, instead of an entire piece of thin steel." We give below a copy of Giffard's Extractor as it appears in his "Cases in Midwifery," etc.,



GIFFARD'S FORCEPS, 1733.

to which the Reviewer referred. Mr. Butter, in the article just mentioned,* says: "The forceps is scarce known in this country, though Mr. Chapman tells us it was long made use of by Dr. Chamberlen, who kept the form of it a secret as Mr. Chapman also does."

In reviewing Dr. Chapman's work, the editor of volume iii, of the *Med. Essays* remarks,† "Mr. Chapman in his essay on the improvement of midwifery, condemns the make of the extractors he has seen others employ, but *does not describe his own*." Remember this is said of Chapman's first edition of 1733, when he is credited by Dr. McClintock and others with the publication of the forceps. But if this be not enough to establish our point, we will adduce the admission of Chapman himself in the preface to his edition of 1735. "I acknowledge myself short" he says "in not giving the figure of my forceps in the former edition. I was not indeed so thoroughly sensible of this defect till I found my essay honorably mentioned by a learned society established in Edinburgh for the improvement of Physic and Surgery, in the *Med. Essays and Obs.* volume iii. As these gentlemen, by saying I have not given a description of that instrument as I used it, seemed to intimate that something is wanting to render this work more complete and satisfactory, I have now" (1735) "subjoined an exact draught of my forceps, which is very little different from that used by the late Mr. William Giffard."‡ This was two years after Giffard had published the forceps—and, we fear, it might have been much longer, but for the implied censure on his omission of 1733 by the reviewer. We give a copy of Chapman's figure of his own forceps—which, notwithstanding his

* *Op. Cit.*, p. 295.

† *Op. Cit.*, p. 295.

‡ I am indebted to my friend, Dr. Geo. N. Aker, for this and other data in connection with the point under discussion, which he kindly obtained for me from the Surg. Gen. Lib., Wash.

* *Op. Cit.* (5th edition) p. 356.

condemnation* of the "extractors he has seen others employ," in his edition of 1733, might be very readily taken for Giffard's; in fact Lee† does apply the title "Chapman's and Giffard's forceps" to the same cut.



CHAPMAN'S FORCEPS.

First Figured in his Midwifery, 1735.

Such is a simple recital of the historical facts, which compel us to give a verdict for William Giffard and against Edmund Chapman — facts which have been for more than a century open to all who chose to see them, and yet, after a long and careful investigation, we have met with but one authority that seems to have recognized them; an authority, however, that has weight with us all and ought to be familiar with our transatlantic brethren. We refer to Messrs. Forbes and Conolly, the late able editors of the *British and For. Med. Review*.‡ They remark somewhat naively, "1735 is not the date of Chapman's forceps, because in 1733 (the date of his first edition) he was evidently in possession of them, *but did not choose to divulge them.*" True, gentlemen! but Giffard did, and therefore let us from henceforth, in accordance with the honest old maxim, 'Palmar qui meruit ferat,' give him the honor of it.

TREATMENT OF HIP-JOINT DISEASE.

BY JNO. N. MONMONIER, M. D.,

Late Prof. of Operative Surgery and Anatomy,
Washington University, Balto.

(A Paper read before the Baltimore Medical and
Surgical Society).

(Concluded.)

Pain in its most acute and severe form may also be relieved by other mechanical means, more especially by the method of straightening the joint at once under chloroform, and then applying the ordinary straight splint and bandage. This plan was adopted many years ago by Mr. Jordan, of Manchester, England, who continued to use it. The explanation of its success is, I have no doubt, the same as that of the weight-and-pulley plan, namely: the removal of inter-articular pressure. Jordan and Gay (English surgeons) have always found this plan successful in relieving pain. Whether it would be equally successful as the weight-and-pulley plan in those exceptional and happily rare cases of acute pain to which I have especially adverted as illustrating the success of the weight-and-pulley plan, I am unable to state.

Scarcely of less importance than the question of local treatment, whether by antiphlogistic means, counter-irritation, extension by weights and the consideration of securing rest to the joint by splints, is the consideration of the constitutional treatment to be adopted in these cases. Considering the destructive character of this disease to depend upon a low form of inflammation, essentially chronic in its character, and associated with a condition of constitutional debility, occurring generally in a strumous diathesis, I am as much opposed to antiphlogistic treatment internally as I am to antiphlogistic means and all severe counter-irritation externally. I am also opposed to the alterative treatment by small doses of calomel, even when combined with iodine and tonics

*Op. Cit. p. 291.

†Ibid p. 359.

‡Op. Cit. Vol. iii, April 1837, p. 418.

as frequently recommended; and rely exclusively upon such remedies as tend to improve the constitutional powers of the patient, more especially cod-liver oil, hypophosphites and phosphates of lime and iron, wine, etc. Experience has convinced me that the phosphates and hypophosphites of lime are very valuable preparations in this and other strumous affections of the joints, caries of the spine, etc. I give either in five grain doses, in combination with ten drops of tincture of iron directly after meals, three times daily. With the exhibition of these remedies, general hygienic treatment is likewise of the utmost importance, especially country air, with a change to the seaside and either out-door carriage exercise daily, or walking with the assistance of crutches, when the leather splint can be used. This includes the general plan of treatment which I adopt in the first stage of hip-joint disease.

The treatment of the second stage, which is essentially that of the formation of abscess and extends from the formation of abscess to the bursting and opening of the same, is conducted on the same general principles as are applicable to the first stage. During the formation of abscess I substitute a gutta-percha for the leather splint and apply lint moistened with warm water under the splint, or, if the patient should be obliged to keep his bed for a short time, poultices may be used.

With regard to opening the abscess when formed, my opinion is against opening it at an early period, as the matter is at a considerable depth, and the wound soon closes; my general plan is to open the abscess when it is increasing in size and inclined to point, or when it is causing any constitutional disturbance. If allowed to attain a large size the subsequent drain upon the system is excessive, and the abscess continues to discharge for a long time. There is also danger

of a large surface of skin passing into a condition of sloughy ulceration, which I have seen occur in several instances, and after the healing process has been completed, a large thin, irritable cicatrix, adherent to the great trochanter, has been left.

As to the mode of opening the abscesses I have for a long time abandoned the small valvular or sub-cutaneous opening, from the difficulty of giving free exit to the thick, curdy, scrofulous matter contained in the abscesses, and also from the liability of these small sub-cutaneous openings to close too quickly. I therefore adopt the plan of a direct opening of at least half an inch in length, made by an ordinary bistoury or scalpel.

In the treatment of the third stage of hip-joint disease, viz: that which extends from the bursting or opening of the abscess to the complete destruction of the joint with disease of the bone, dislocation, etc.,—the chief question of surgical importance which arises is in reference to the practice of excision of the joint, as it is called, or of excising the head of the femur.

Time will not permit the discussion of this subject, but I believe the general conclusion to be that the operation is only justified when there are sufficient indications of extensive bone disease, and more especially of necrosis, in which the tedious and uncertain processes of natural separation of the sequestrum urgently calls for surgical interference. In brief, diseases in and about the hip-joint, as far as the question of operation is concerned may be divided into two great classes, those wherein no suppuration occurs however acute the inflammation may have been, and those wherein abscess forms. But though recovery takes place eventually in many cases of this character, yet, in many instances, the drain upon the constitution is so great as to entirely break down the powers of the system, together with masses of necrosed bone too extensive or too

deeply seated to be eliminated by the natural process. In such cases conservative surgery intervenes, and endeavors to save life by operation should be made; and here the inconsistency of some surgeons presents itself against operative procedure, namely, looking upon the entire destruction of the conformation of the joint with this immense drain upon the system as necessarily fatal, and yet being adverse to the only remaining step to save life. As far as I know, White, of Manchester, in 1769, was the first to propose excision of the head of the femur, and Anthony White, of Westminster Hospital, in 1821, the first to perform it. Hancock, the Englishman, was the first one who undertook the removal of large portions of necrosed acetabulum and pelvic bones, and since that period the operation has been performed several times by others with good and lasting results.

Lastly, another result of hip-joint disease to be considered is *anchylosis*. Time will not permit a lengthy reference to this condition and the various modes of relief, and only some general remarks will be made, first: the position of the lower extremity in relation to the hip and its influence upon the lumbar spine, etc.; secondly: flexion of the limb upon the pelvis and interference with the patient's movements, etc. Should the axes of the femur and trunk be in the same line, but little treatment is often required, as the lumbar vertebræ will acquire increased rotary movement and the patient will stand and walk with ease, although there exists a solid osseous fusion between the head of the femur and acetabulum. The only difficulty arises from the extended position of the limb in getting up steps and in sitting. For this condition many surgeons wholly ignore operative interference to restore mobility.

However, on the other hand, should the anchylosis be not firmly bony but fibrous, steps may be taken to

bring about a certain amount of motion by friction, pressure, and even by forcible movement under chloroform, and sometimes by sub-cutaneous section of tense bands of fascia, tendinous and muscular structures of the upper portion of the thigh in the region of the anterior spinous processes.

In flexed anchylosis of the hip, the foot cannot be brought to the ground as long as the spine is erect, and in order to get the toes to the ground the entire trunk has to be thrown forward and the lumbar vertebræ will be distorted and produce in their line a great convexity or arch forward. This angular anchylosis needs to be corrected and the limb brought down in a straight position, and should there be much shortening the patient can wear a high-heeled boot. In simple fibrous anchylosis this can readily be done under the influence of chloroform. But in other cases great resistance is made by the contracted muscles and tissues of the upper and anterior part of the thigh. To overcome this, sub-cutaneous section should be made; the muscles mostly implicated are the rectus, pectineus, gracilis and tensor vaginæ femoris. After the limb has been placed in the straight position the long splint should be applied or the weight apparatus adjusted.

It is only in the osseous angular anchylosis that the majority of the surgeons make sections to restore mobility. Of such procedures some few remarks must be made. The principal modes for restoration of motion are division of the neck of the femur entirely above the trochanters, division between the trochanters, removal of a section of bone between the trochanters, and an older method, a section below the lesser trochanters.

The first operation of the kind was performed by Barton, in '26, removing a V-shaped piece of bone from the neck of the femur and great tro-

chanter, resulting in motion and false joint. The case was eminently successful. The example of American surgeons was followed in Europe by Textor, '41. and by Maisonneuve, in '47. In March, '69, Erichsen made a similar operation at University College Hospital upon a girl of sixteen years with good recovery,—a straight and useful limb, though consolidation took place at the line of section, no attempt having been made for the formation of false joint.

From this a double object was brought to view, viz: establishment of a mobile false joint and rectification of the malposition of the limb. There seemed to be no doubt of its practicability. Still it did not take place as a recognized operation for correcting this deformity until Sayre of New York, in '62, had made successful results in two cases. It may be said that Sayre is primarily entitled to the credit of having made it a recognized operation upon explicit and distinct principles. His great idea was to cut *above* the trochanter minor so as to save the attachment of the psoas and iliacus muscles to the bone below and to preserve flexion; also by cutting out a semilunar slice of bone with its convexity upwards, and then round off the upper end of the lower fragment, so as to imitate as near as possible the natural shape of the joint—for the purposes of motion and to prevent slipping of the bones. The division of the bone is made by the chain saw, the transverse section being effected first, the convex lastly.

Mr. W. Adams, of London, surgeon to the Royal Orthopædic Hospital, has brought forward a much more simple operation, presenting the same objects. The plan is to divide subcutaneously the neck of the femur about its centre. He first put this idea into execution in '69, for the relief of angular ankylosis. In brief for the operation, the tenotome is introduced a little above the top of the great trochanter

and carried straight down to the neck of the femur, dividing the muscles and opening the capsule freely. The knife is then withdrawn, a small saw about one-quarter of an inch wide and three inches long set in a strong angular handle, is passed down to the bone which is cut through from before backwards. The movement is more that of filing than sawing. Shortly the bone is divided. The wound is then closed by a pad and the limb brought straight. In his first case it was necessary to divide the long head of the rectus, the adductor longus and tensor vaginæ femoris, as these muscles had contracted so extensively and firmly. With regard to the operation Adams remarks, "it is of great importance for the surgeon to remember the altered direction of the shaft of the femur which is usually adducted as well as flexed forwards, so that the division of the neck may be made at right angles to the axis of the bone and not obliquely, or in a direction more or less parallel to the shaft." His first attempt, after the operation, to procure a false joint was a failure and the limb ankylosed in a straight position. Since then the operation has been successfully performed by himself and many other surgeons. As to the practicability and chance of success of his operation I can fully attest, as there is a boy going about the city upon whom I operated some four years since for flexed ankylosis by this method; the result being perfect with a false joint and extensive mobility. Maunder (English) prefers a chisel to the saw in using sub-cutaneous osteotomy of the neck of the femur, and has had considerable success by this mode.

Erichsen remarks, "comparing Adams' operation with those of Barton and Sayre and others, there can be no doubt of its superior simplicity and safety; although it is perhaps less likely to be followed by motion of the limb than when a piece of bone is

removed by Sayre's method, yet it must be admitted that not only is a movable false joint of doubtful utility, but it seems to have been very difficult of establishment, so great is the tendency to bony ankylosis after these sections."

In conclusion I would state that in Feb. '73, whilst on a visit to Philadelphia, I had an excellent opportunity to witness in the Episcopal Hospital (Children's), under Surgeon Ashhurst, many cases of hip disease and its consequences treated surgically. My attention, from seeing so many cases swung, excised—with splints applied and pulleys attached, etc., was from that time to the present closely brought to bear upon what resources we have in surgery to produce useful limbs and correct deformity, and how often and how long patients are allowed to hobble along with malposed limbs, etc., as best they can—their parents or friends in utter darkness as to the blessings and good results conservative surgery of the present day offers. Since that period I always advocate some operation suitable to the particular case to restore usefulness to the limb.

CLINICAL REPORTS.

SOME OPERATIONS FOR THE REMOVAL OF DISEASED LYMPHATIC GLANDS.

BY RANDOLPH WINSLOW, A. M., M. D.,
Demonstrator of Anatomy, University of Maryland.

The occurrence in my practice during the past summer of several cases of glandular tumors requiring excision, emboldens one to hope a short narrative of them may be neither uninteresting nor uninstructional.

CASE I, at University Hospital. Chronic Bubo; Excision.—C. V., an Italian seaman was admitted with buboes on both sides, the result of chancroid. He was treated in various

ways without benefit, the glands remaining hard and non-suppurating. It was determined to excise all the diseased glands. This was done on July 14th, by straight incision parallel to Poupart's ligament, through the skin and fascia, and enucleation of the glands by the use of the handle of the scalpel and the fingers. By this method very little blood was lost, as the torn vessels rapidly retracted. When the enucleation was complete, Poupart's ligament and the lower portion of the aponeurosis of the external oblique muscle and upper portion of fascia lata, showed as distinctly as in a dissection upon the cadaver. The deep cavities left were packed with carbolic oakum, and daily irrigations with antiseptic lotions were employed. The wounds healed kindly, and he left for Italy about a month subsequent to the operation.

CASE II. Chronic Scrofulous Bubo; Excision; Death.—I. T., a Frenchman, about 40 years of age, a cook by profession, cachectic in appearance, was admitted on July 12th, for the removal of enlarged scrofulous inguinal and femoral glands. There was much inflammatory action around the glands and suppuration of the cellular tissue. On July 16th, the whole mass upon both sides was removed, the dissection extending far down Scarpa's triangle on the left side. Some hemorrhage occurred from the venous trunks emptying into the internal saphenous vein, which necessitated the application of several ligatures. The dissection exposed Poupart's ligament and the fascia lata, and the femoral artery was seen to be pulsating under the fascia. The parts were dressed with carbolic oakum. At first the wound granulated well, and it seemed probable that he would recover, but night-sweats soon supervened, and he emaciated rapidly. Two weeks later the scrotum became œdematous and in a few days gangrene set in and extended until about one-third of the scro-

tum was involved. Under 5ss doses of Tr. Ferri Chlor. every two hours, and forced alimentation with moderate stimulation, the gangrene was arrested and repair began again in both the scrotum and the operation wounds. The vital powers, however, did not seem to be equal to the task of reparation, and the wounds became pale and discharged a serous fluid. He died three weeks after the operation from exhaustion and a moderate septicæmia.

CASE III. Excision of Enlarged Cervical Glands.—B., aged 17, an inmate of the House of Refuge, had scarlet fever about November, 1880, followed by an enlargement of the lymphatic glands in the superior carotid and digastric triangles. These glands showed no disposition to suppurate, but were very disfiguring. The operation was performed on July 28th, a straight incision being made along the anterior border of the sterno-cleido-mastoid muscle, about 4 inches in length. The glands were chiefly placed behind the sterno-mastoid, and were enucleated by the fingers without much difficulty, leaving a large cavity to be filled by granulation. A drainage-tube was inserted and the edges of the incision were coapted by silver wire. Union of the integumental wounds was effected by the first intention except at the point of exit of the tube. The cavity was kept cleansed with antiseptic solutions and healing was quickly accomplished. In this case as in other operations for the extirpation of glands, the great advantage of using the fingers instead of the knife for the severance of the deep attachments of these tumors (and they always dip down into the neck more deeply than is supposed at first) was apparent, as by this method the main blood-vessels escape injury, and much hemorrhage does not occur.

CASE IV.—Excision of Enormous Adenomata of the Neck Affecting

Both Sides, and a Portion of Parotid Gland.—S. C., about 12 years of age, an inmate of the Johns Hopkins C. O. Asylum, has had cervical adenitis for several years, until finally the deformity became hideous. In addition to the deformity the skin had ulcerated and there was a constant discharge of pus from several openings. The tumors were present on both sides; on the left side the morbid growths were placed over the parotid and submaxillary glands, making a large protrusion extending from the condyle almost to the symphysis of the lower jaw. On the right side the tumor was not so large, yet it extended from the angle to the symphysis, and directly covered the submaxillary glands. On April 25th, an operation was undertaken for the removal of the diseased masses, an incision being made from in front of the left ear downwards into the superior carotid triangle. The growths extended deeply into the neck between and upon important vessels and nerves, and were so firmly attached to the parotid and submaxillary glands that it was necessary to remove a considerable portion of the parotid. Notwithstanding the greatest efforts to prevent hemorrhage, considerable bleeding occurred, and it was deemed best not to remove the whole mass at one operation. The deep cavity was filled with carbolized oakum and healed by granulation in about a month. Neither paralysis of the facial muscles nor salivary fistula resulted from the excision of the portion of the parotid gland. In this operation, although many vessels were injured not one ligature was applied, torsion being employed instead, and with the greatest satisfaction.

The remaining growths were subsequently removed without difficulty. On the right side the growth was adherent to the submaxillary gland, and when removed the digastric triangle was shown almost as well as in a dissection upon the subject; the submax-

illary salivary gland being beautifully displayed. The case progressed favorably and when healing finally was effected the improvement in her personal appearance was immense.

The subject of the origin and treatment of scrofulous neck was considered of sufficient importance for a paper to be read by Dr. Allbutt, at the recent meeting of the International Medical Congress. In this paper Dr. Allbutt insists upon the local cause of many of these growths from irritation of the neighboring mucous membranes, and the advisability of the early removal of these glands was urged in order to forestall amyloid changes in vital organs.

In case IV, there was noticed a marked tendency to collapse, and the operation was prematurely finished. In this connection, Agnew says: "The extirpation of tumors, situated in the deep portions of the neck is attended by much greater shock than is the removal of similar growths of much larger bulk in less vital portions of the body" (Surgery, vol. 2, p. 379).

I wish to call attention again briefly to the danger of using the knife in the deep portions of the neck especially, but also in any operation in which there are deep attachments amongst important vessels and nerves. Enucleation can generally be effected by the finger or handle of the scalpel, and when deep attachments must be cut, it is important to ascertain by the sense of touch whether large arteries are involved, and, if such is found to be the case, to divide the pedicle by the thermo-cautery or ecraseur, or first surround it with a ligature and divide it external to the ligature.

I believe torsion of small and moderate sized arteries to be much preferable to the ligature, as the wound is left unobstructed during the operation and no foreign body is retained to delay healing.

The propriety of removing growths in the neck, which not only subject

the patient to the danger of systemic degenerations, but also occasion repulsive deformities, is obvious; but I believe it to be equally as justifiable and as good treatment to remove similar growths in other regions. In the groin chronic enlargements are frequent, sometimes due to scrofula, sometimes to chancroid, in which the primarily inflamed glands do not themselves suppurate, but by their pressure upon the surrounding parts cause periadenitis with suppuration, and often ulceration of the skin. These cases will last months unless the glands are either enucleated or destroyed by cauterization. Their removal by operation is by all odds the quickest and most certain method of obtaining a favorable result.

SOCIETY REPORTS.

BALTIMORE ACADEMY OF MEDICINE.

STATED MEETING HELD OCT. 19TH, 1881.
(*Specially Reported for the Maryland Med. Journal*).

SAMUEL C. CHEW, President, in the Chair.

INTRACANALICULAR FIBROMA OF MAMMA.—*Dr. Tiffany* exhibited a growth with this history: The patient, a young woman, æt. 19, had observed two years before a small lump, 1½ inch outside the nipple. After trial of various local remedies, she presented herself to Dr. Tiffany, who found a growth as described, presenting the characters of an ordinary fibroid tumor, from the position, size, slow growth and extreme mobility of which he made the above diagnosis and removed it. The specimen showed the growth arising in the interior of one of the milk-ducts. The mother and sister of the patient had had similar growths removed from the same situation, the former by the late Prof. N. R. Smith, the latter by the speaker, who had removed six such growths within the last few months.

RAPIDLY-GROWING NÆVUS OF CHEEK.—*Dr. Tiffany* also reported the case of a well-nourished infant, æt. 4 months, the child of healthy parents, without any predisposing family history,

who at birth presented upon the left cheek a small vascular nævus or mother's mark, about the size of a three-cent piece. This grew rapidly, and when the case came under treatment four days ago, the tumor occupied nearly the entire cheek, as far back as the ear, and was about half as large as an adult fist. It involved the entire thickness of the cheek and pulsated both externally and internally. Pressure diminished the amount of blood in it. On yesterday strings soaked in a solution of caustic potash were passed through the growth in various directions. There was slight bleeding, but after a half-hour the patient was easy. To-day pulsation has ceased in the centre, for a space of about two inches square, showing that coagulation has there taken place. Should success follow this effort it will be repeated, successive portions of the mass being obliterated until it is converted into scar tissue. The large size and rapid growth of this tumor were commented upon. Generally nævi about the face go away if left alone.

Dr. McKew's experience had been the reverse of *Dr. Tiffany's* with regard to vascular nævi. They had always shown a tendency in his hands to increase, or at most to remain stationary.

Dr. Chisolm said that they would disappear in many cases if left alone; in one case where the growth was seated on the lid he had advised that it should be let alone, and in two years it had disappeared. He thought that a saturated solution of tartar emetic was better than the potash solution employed by *Dr. Tiffany*.

Dr. Tiffany had seen many such cases treated by non-interference by the late Prof. N. R. Smith, and his own experience thoroughly justified a similar course. In connection with the subject he related a case of vascular nævus situated on the right natis, in a patient about forty. It was ferociously large and pulsated strongly. The pulsation extended into the bowel, where three or four vessels, the size of the femoral, could be detected. The affected natis is twice as large as the opposite one, and the patient finds it necessary when moving about (he is a carpenter) to support it in a bag. The patient has been treated

by the passing through it of strings soaked in a solution of tartar emetic, but without avail. The tumor bleeds readily, and he has lost much blood. It evidently extends to the gluteal muscles and has entered the pelvic cavity.

Dr. McSherry, who had had this patient also under treatment, said that he had profuse hemorrhages which it was feared would prove fatal.

PARTIAL NECROSIS AND REMOVAL OF MALLEUS.—*Dr. Chisolm* exhibited a portion of the malleus, which had been separated from the rest of the bone by necrosis and had been removed instrumentally. The separation took place at the neck, and the head of the bone was left behind in its normal position.

PAPILLOMA FROM THE SOFT PALATE.—*Dr. Donaldson* exhibited a papilloma, which he had removed from the soft palate on the right side, midway between the arch and posterior nares. Its surface was flat; it was about the size of a hickory nut. Owing to its shape it was impossible to get hold of it from behind; hence an incision was made through the soft palate and the growth dissected out. It is rare for such growths to be found in this situation.

FREQUENT ASPIRATION IN DOUBLE HYDROTHORAX DUE TO CARDIAC DISEASE.—*Dr. Donaldson* also reported a case of double hydrothorax in a man æt. 45, the result of dilatation of the heart consecutive to mitral disease. April 17th the patient was cyanotic, anasarca, and couldn't lie down; it was supposed he could live only a few minutes. Sixty-nine ounces of serum were withdrawn by the aspirator from the right side. Four days later forty-nine were withdrawn from the other side. This was continued at intervals of a few days on alternate sides. August 12th one hundred and twelve ounces were withdrawn; this was the largest amount the speaker had removed at one operation. The last aspiration (of fifty-three and three-fourth ounces) was done September 4th. Altogether in five months one thousand five hundred and sixty-three ounces were removed. The fluid was purely serous and without traces of fibrine.

The lungs expanded after each operation and the patient was able to lie down

in perfect comfort. He has taken digitalis (English) ever since April. The patient now feels perfectly well.

Dr. McSherry recollected seeing a case in which *about* a gallon of fluid was removed at one time from the pleura with Bowditch's instrument.

ABORTIVE PNEUMONIA.—*Dr. Chew* related the case of a vigorous person *æt.* 35, leading an active life, who was seized about ten days ago with a severe chill. The next morning the pulse was 120, temperature $103\frac{1}{2}^{\circ}$, and there was lancinating pain in the left side, but no crepitant r  le. In the evening crepitant r  le was developed and there was rusty expectoration. The next morning the chest was filled with fluid. As this fluid diminished there was no evidence to be found of lung consolidation. He doubted very much whether the pneumonia advanced to the stage of consolidation. The treatment was Fleming's Tinct. Aconite and large doses of quinia. The patient is now convalescent.

Dr. Williams was called to a patient, cyanosed, and with a crepitant r  le audible over the whole of the right lung. He bled him very freely until he fainted, and the perspiration broke out freely. Fifteen-grain doses of Dover's Powder were then ordered every four hours. The case did not advance to the second stage and the patient was convalescent in a week.

TRAUMATIC PNEUMONIA TERMINATING IN GANGRENE.—*Dr. McSherry* related the history of a case of traumatic pneumonia. The patient was struck on the side with a broomstick; symptoms of pneumonia developed with crepitation. For a day or two the patient did well after cupping; then there was a rather sudden change—a tendency to asthenia, for which whiskey was ordered freely. Percussion caused pain. There was no pleural friction sound audible at any time. Death ensued, and on *post-mortem* the lung was found gangrenous. This was a surprise as there was no odor about the breath or sputa which were abundant. He believed the asthenia was due to a commencing septic condition, and that the gangrene was a cadaveric change. He called on *Dr. Atkinson*, who had made the *post-mortem*, to state what was found.

Dr. Atkinson.—There were firm and extensive old pleuritic adhesions. There was a cavity occupying the lower and part of the upper lobe. The lung was considerably engorged but there was no hepatization. The odor was offensive, but not so much so as might be expected from gangrene. There was evidence of aortitis; there was fatty degeneration of heart, liver and kidneys; the kidneys were contracted and contained cysts; projecting inward from the third rib was a sharp spicule of bone (an exostosis) at the site of the pain and tenderness; there was no pleuritic effusion.

Dr. Donaldson.—There is a form of pneumonic phthisis, in which the odor is as offensive as in gangrene; it is due to rapid breaking down of lung tissues.

Dr. Chew.—A form which proves pretty rapidly fatal.

Dr. Williams had seen a case of pneumonia in the stage of suppuration, in which the odor was terrific.

TRAUMATIC TETANUS: RECOVERY UNDER TREATMENT BY CAMPHOR.—

Dr. Van Bibber reported the case of a boy, *  t.* 13, who received a wound from a toy pistol July 4th. The wound involved the palm of the left hand, at the base of the ring finger. The wound remained for some time in the flesh. Fifteen days afterwards the body began to be rigid, and there were frequent convulsive starts. *Dr. V. B.* first saw the case July 22nd; the disease was then well marked; any movement caused spasms. Pulse 96, respiration 40–60, temperature 99° . The tongue had been bitten. As no recovery had yet taken place during the prevalence of tetanus, it was determined to try other treatment than had been employed. The patient was placed in a well-ventilated room, perfect quietude enforced, and camphor was relied upon as the remedial agent. During the removal up stairs, he nearly died, and it was a long time before reaction could be brought about. Nourishment (defibrinated beef blood, &c.) was administered per rectum; camphor water was given every two hours, in $\frac{3}{4}$ ss doses; a piece of camphor was kept in the mouth; the whole body was rubbed for an hour at a time with camphorated oil; camphorated compresses were applied

to the abdomen, and a saturated solution of camphor and whiskey was applied to the spine, soles of the feet, &c. Under this treatment faithfully carried out the patient improved, and on July 29th was convalescent.

Dr. Van Bibber was led to employ this agent because he had seen it used twice before. In one case, a large Welshman wounded in the foot, it was employed by Prof. Charles Frick. The agent was applied to the wound, feet and spine and quietude was enforced. A piece of iron was removed from this patient's foot by the speaker.

Dr. Chisolm said that in his early experience two cases of traumatic tetanus had recovered from simple rest and feeding them as freely as possible. He supposed that he had solved the treatment, and that it was only necessary to maintain life until the force of the disease had exhausted itself, i. e. convert the acute into a chronic affection. His subsequent experience did not confirm this view, as for years after, all the patients whom he saw with tetanus died.

Dr. McKew was skeptical as to the relation of the camphor to the recovery, as there was so little taken and there could not have been great absorption from the mode of employing it.

Dr. C. Winslow thought that the camphor might have gained access to the system by inhalation. Being constantly breathed, it doubtless exerted its effect thus. He had known the breathing of an atmosphere impregnated with the remedy by means of cloths saturated in a solution to arrest spasmodic affections.

CLINICAL SOCIETY OF MARYLAND.

REGULAR MEETING HELD OCTOBER 21,
1881.

(Specially Reported for the Maryland Medical Journal).

J. EDWIN MICHAEL, V. P., in the Chair.

The first business being the annual election of officers was soon dispatched. Dr. I. E. Atkinson, the president elect, having been installed—

Dr. Tiffany exhibited a cast of an OSTEO-SARCOMA OF THE TIBIA. The patient, a man, aged 33, attributed the

disease to a sprain of the ankle received two years ago. The joint remained painful, and the swelling increased; in time it was lanced by a physician. There was some hemorrhage on enlarging the incision and introducing a finger; a bandage was applied, and the hemorrhage ceased. The patient subsequently came under Dr. Tiffany's care when the part presented the appearance shown in the cast, viz: a red fungous growth, hemispherical in shape, about two and one-half inches in diameter at the base, projecting from the inner ankle; there was considerable swelling of the joint especially in front and in the instep. The posterior tibial was felt in front of the mass. The above diagnosis having been made, the limb was amputated at the knee joint, by the long anterior flap method. About ten days have elapsed and the patient is doing well. Upon examining the limb, five inches of the lower extremity of the tibia were found to have disappeared being replaced by the growth; the fibula was unaffected. The glands at the groin which were enlarged at the time of the operation (probably from irritation) have remarkably diminished in size. The tumor was encapsuled. No microscopic examination yet made. Substance of tumor was dark red in color, probably myeloid sarcoma.

SUPERNUMERARY FINGER.—*Doctor Morison* exhibited a supernumerary finger removed from the ulnar side of the hand of a male mulatto child. The same anomaly existed on the other hand. There was no history to indicate heredity in the case.

Dr. Ashby recollected a negro man thus deformed, whose parents presented no abnormality, but of whose children three boys exhibited the redundancy, whilst one girl was normally developed.

Dr. Atkinson saw a male child with the redundancy, whose mother's brother also had it. He believed that it generally occurred in male children, and was derived from the mother's side of the family.

Dr. Winslow saw a case, in which notwithstanding this evidence of redundant growth there was a cleft palate and double hare-lip.

Dr. Tiffany was able in one instance

to trace the anomaly through three generations; the male members alone were affected, the females escaping. In another case a mulatto woman had eleven boys, six of whom were affected, whilst the other five were unaffected; she said her mother's father also had it.

NERVE-STRETCHING IN LOCOMOTOR ATAXIA.—*Dr. J. W. Chambers* read a paper upon this subject which is published in this number of the JOURNAL.

Dr. Miles said, that an operation which obtunds the nerves will relieve pain, is in accord with what we know; permanent relief was not to be expected from the operation in a disease like locomotor ataxia.

Dr. Rohe, in view of Westphall's mistake (the patient died under chloroform and changes were found in the sciatic nerve but none in the cord) asked whether a postive diagnosis of locomotor ataxia was possible.

Dr. Atkinson, referring to the fact that many of these cases were reported to have been syphilitic, said that sclerosis from syphilis would be as permanent as from any other cause, the pressure being to blame in either case. In one case it was said that the nerve was stretched so much as to raise the patient off the table; he desired to know how much weight the sciatic nerve would bear.

Dr. Chambers said it had been laid down that it would bear a weight of 160 to 180 pounds. With reference to the curability of the disease, it is probable that not every case commences in the posterior columns, of the spinal cord; Langenbuch's paper rather proves that at first the disease is limited to the periphery, although doubtless affecting the cord if it lasts long enough.

NERVE-STRETCHING IN TETANUS.—*Dr. Tiffany*, having been requested to relate the history of this case, said that he saw the boy two days after the development of the disease. The wound had been inflicted by a toy pistol, and was situated at the base of the right index finger, on the palmar surface. The median and radial nerves were stretched under chloroform about $1\frac{1}{2}$ inch above the annular ligament of the wrist, until something gave away. All the fibres were equally stretched. After stretching, the nerves were too long to go back

into their places, and had to be pushed back with the handle of the scapel. The wounds healed at once. For forty-eight hours afterwards the symptoms were very much relieved, and the patient was able to open his mouth; he had no more opisthotonos, and was able to swallow until forty-eight hours before his death, which occurred seven days after the operation.

EDITORIAL.

THE NATURE OF THE DIPHTHERITIC CONTAGIUM.—Under the auspices and at the suggestion of the National Board of Health, Drs. H. C. Wood and Henry F. Formad, of Philadelphia, have recently conducted researches on "The Nature of the Diphtheritic Contagium," which will receive marked attention from the profession. The full text of the work is now in the hands of the National Board and will be shortly published by them. From an abstract of an address made before the Philadelphia Academy of Natural Sciences, and published in the Philadelphia *Medical Times*, we are able to present the following items:

In the spring of 1880 Drs. Wood and Formad began work by inoculating rabbits with diphtheritic membrane taken from the throats of patients in Philadelphia. They found that only in a few cases was anything like diphtheria produced in the rabbit by inoculating with the membrane. The inoculations were practiced by putting pieces of the material sometimes under the skin, sometimes deep in the muscles. Many rabbits died after some weeks, not of diphtheria, but of tuberculosis. Next the tracheæ of a series of rabbits were opened and false membranes inserted. A severe trachitis was frequently produced, attended by an abundant formation of pseudo-membrane. This false membrane and the false membrane of diphtheria were identical, both containing fibres, corpuscular elements and various forms of micrococci. A number of experiments were made to determine whether other inflammations of the trachea than that caused by diphtheria are accompanied by the formation of false membrane. It was demonstrated that the production of false membrane

has nothing specific in it, but that any trachitis of sufficient severity is accompanied by this product. This membrane does not differ from that of true diphtheria, except it be that micrococci are not so abundant in it. Last spring investigations were resumed at Ludington, Michigan, by Dr. Formad. Diphtheria prevailed there as an epidemic, almost all the children had it, and one-third of them were said to have died. Dr. Formad examined a large number of cases and obtained a large supply of diphtheritic membrane and pieces of the internal organs of a child upon whom he had made an autopsy. In every case the blood was found more or less full of micrococci, some free, others in zoogloea masses, others in the white blood corpuscles.

Experiments were made of the Ludington material upon animals. Inoculations were practiced under the skin deep in muscles and in the trachea and in all cases the results were similar. A grayish exudation appeared at the seat of inoculation, along with much local inflammation, the animal sickened and died in a few days. In some cases the false membrane spread where the poison had been put in the trachea up to the mouth. The blood examined during life or after death contained micrococci similar to those found in the Ludington cases. It was shown that micrococci first attack the white blood corpuscles, which, under their influence, alter their appearances and lose their granulations. They finally become full of micrococci, which now are quiescent and increase until the corpuscle bursts and the contents escape as an irregular, transparent mass full of micrococci, and form the so-called zoogloea masses. The bone-marrow of the animals was found full of leucocytes and cells containing micrococci. In answer to the question, is the disease produced by diphtheritic inoculation in the rabbit diphtheria? — they concluded that it is, the poison being the same, the symptoms the same and post-mortem lesions identical. The contagious character of the disease is retained, as they succeeded in passing it from rabbit to rabbit.

The next series of experiments were made to determine whether micrococci are or are not the cause of the affection.

It was shown by these experiments that the solid particles of the membrane which are the essential poison of malignant diphtheria are the micrococci, which must be either the poison itself or the carriers or producers of the poison.

After experiments with various culture fluids Drs. Wood and Formad conclude that as no difference is detectable between the micrococci found in ordinary sore throat and those of diphtheria, save only in their reproductive activity, they are the same organisms in different states. As the result of some hundreds of cultures they believe the vitality under artificial culture is in direct proportion to the malignancy of the case from which the plant has been taken.

In rabbits inoculated with cultivated micrococci they succeeded in producing diphtheria with the second generation, but never with any produced later.

"This success," they say, "taken in conjunction with the urine experiments already spoken of, seems to us sufficient to establish the fact that the micrococci are the *fons et origo mali* of diphtheria."

THE DANGER OF MONOPOLIES IN PHARMACEUTICAL PREPARATIONS. — Some eighteen months ago Drs. S. Ringer and Wm. Murrell, of London, brought to the notice of the profession a drug known as "Tonga," and published the results of their investigations in the *London Lancet*. Tonga has been used by the natives of the Fiji Islands for several centuries as a remedy for neuralgia, but had not been known to the profession until the publication of Drs. Ringer and Murrell's article. Their report created more or less interest in the drug in the medical and pharmaceutical circles in this country and a call was at once made by the profession for it. This demand induced an enterprising drug firm, Messrs. Parke, Davis & Co., of Detroit, to dispatch a special agent to the Fijis to secure a supply of the genuine article and to make inquiry into the nature, character and uses of the drug by the natives. After going to this expense, this firm placed the drug in the hands of the profession and generously donated large quantities to hospitals for careful clinical test. A moderate demand sprang up but the investment had hardly had the

time to become a paying one before legal proceedings were instituted against this firm to restrain them from the use of the name of the drug,—*Tonga*. It seems that an English house, Messrs. Allen & Hamburg, have registered the name "*Tonga*" as a trade-mark on the drug *Tonga* and claim an unlimited monopoly of the manufacture and sale of the article. This drug house has commenced a suit in the United States District Court through their agents, Messrs. Schieffelin & Co., of New York. This suit involves the principle whether a party has the right to trade-mark the proper name of an article and thus exclude others from the manufacture of the same article and the name having by adoption and use become the name of the article, whether others have the right to manufacture and sell the same article under the same name, the article not having been patented. It is understood that when the case was brought up, the complainants supposed as the chemical extract "*Tonga*" is of no considerable importance, that the defendants would consent to cease to use the article and the case would be dropped.

The defendants, however, regarded the principle involved as one of vital importance to legitimate pharmacy and will not consent to the settlement of the principle adverse to the ground taken by them by any other court than the court of final resort. Parke, Davis & Co. have made an open fight against this abuse of the trade-mark law, and are seeking to establish a principle which will place pharmacy on a scientific basis. There can be no question that much evil results from the abuse of the trade-mark system as it indirectly leads to monopoly in the manufacture and sale of valuable articles.

The profession is materially interested in the manufacture of pure drugs, and in the establishment of the science of pharmacy upon such a basis as will insure the use of agents of scientific value. It can ill afford to countenance the use of preparations the composition of which is not known and which are not given to the profession in a fair manner.

The fact that an article has been protected by a trade-mark does not imply that it has no scientific value. Many of

the best known preparations are protected in this manner, but it is to be regretted that the necessity has arisen for such protection, as it opens the doors to the system of unlimited control which may create artificial demand through unscientific and unprofessional advertising.

It is to be hoped that some steps will be taken to reconcile the diverse interest of the pharmaceutical trade, and that pharmacy may be put upon a strictly scientific basis. The efforts which Parke, Davis & Co. are making in this direction we hope will be properly appreciated by the profession.

REVIEWS & BOOK NOTICES.

Text-Book of Modern Midwifery. By RODNEY GLISAN, M. D., Emeritus Professor of Obstetrics and Diseases of Women and Children, in the Medical Department of the Willamette University, &c. Presley Blakiston, Philadelphia, 1881. 8vo. Pp. 639.

It has now been many years since any work upon obstetrics emanated from the pen of an American physician. The works of Meigs, Hodge and Bedford have had their day and are now among the things of the past. Sacred they are, it is true, in the memories of many for associations with early study and for faithful service rendered in days gone by, but no longer representative of the rapidly advancing field of obstetric practice. Good books upon this subject have recently appeared in Great Britain which it were almost hopeless to attempt to excel, and yet there are many and good reasons why there should be a demand among us for works written by our own countrymen, and it is natural that efforts should be made to meet this demand. Whilst Parvin and Lusk are (it is said) engaged in similar authorship, Prof. Glisan anticipates them and sends us this contribution of his pen, from the distant shores of the Pacific. No claim is made for originality of views and prac-

tice; the author has simply sought to present the subject of midwifery in a condensed and practical form, faithfully representing this branch of medical science in its latest phase, especially as taught and practiced in America. An examination of his work assures us that it has been well and conscientiously done. The simplicity and straightforwardness of style are not the least attractive features of the book.*

The Wilderness Cure. By MARC COOK.
Wm. Wood & Co., New York,
1881. 8vo. Pp. 150.

This is a personal narrative of a victim of consumption, who was induced to try camping out in the Adirondack mountains of northern New York, a region first prominently brought into notice, in this connection, by a paper read before the New York State Medical Society by Prof. Loomis, of New York, in 1879, and afterwards published in the *New York Medical Record*. It tells how, in nineteen weeks of out-of-door tent-life, from June 21st to November 3rd, the symptoms of advanced phthisis were all improved and strength and spirits returned, to continue and increase with the subsequent period of indoor life. We learn that the book has attracted great attention, and has led many consumptives to pursue a similar mode of treatment. The matter has doubtless been overdone, for in so hopeless a disease as consumption many cases entirely unsuited for the effort and exposure here practised, must eventually have followed the example of the author, and with disastrous results. But that does not render less convincing the evidence here given—in this delightful personal narrative—of the great virtue of *out-of-door life* in a high and healthy inland region, in the treatment of consump-

tion. Of all remedial agents none can compare with this, and we welcome any work which, like the one before us, seeks to impress this fact upon the public attention.

Transactions of the Medical and Surgical Faculty of the State of Maryland at its 83rd Annual Session. Baltimore, 1881. 8vo. Pp. 398.

This is the most pretentious volume the State Society has yet issued, being nearly twice the size of that of any previous year. The excess is chiefly due to the publication of the Sesqui-Centennial Addresses, prepared last fall in honor of the 150th anniversary of the founding of Baltimore, and the several invited papers of Prof. Martin, Mr. Sedgwick and Dr. Sternberg. The historical addresses undoubtedly will have a deep interest for Maryland physicians; and, being prepared with great care and labor, they will always serve as authorities in matters relating to the past history of the profession in this city and State. Hastily drawn up at first, they have been so thoroughly revised and amplified, that they would hardly be recognized as the crude papers which the necessarily hurried preparation compelled them to be at the time of their first presentation. The invited papers already referred to undoubtedly enhance in a very considerable degree the value of the volume, being researches of great novelty and value in regard to important questions in physiology and experimental pathology. In regard to the work proper of the Faculty,—the reports of sections and the volunteer papers of the members generally show a fair degree of scientific excellence; they are all of a practical character and will well repay perusal. On the whole, we may say, that the volume is one highly creditable to the profession of the State, and that we may send it forth without fear that we will incur undue censure or criticism from it. The annual address of

* It may interest the home reader to know that Prof. Glisan is a Marylander and a graduate of one of our Maryland schools.

Prof. Goodell, "On the Dangers and the Duty of the Hour," has already attracted much attention and will undoubtedly be read with universal interest. There is one feature—a new one in this volume—to which we would allude with emphasis, and that is the reports of the discussions. Nothing will create on the part of our members a more lively interest in our annual sessions, or arouse a more healthy life and activity in our venerable society than the publication of these discussions, and we hope that more attention will hereafter be paid to this subject and that an effort will be made to secure more full and satisfactory reports of them than has been possible in the present volume.

MISCELLANY.

SOCIETY BULLETIN.—*Academy of Medicine* will meet Tuesday, November 1st, at 8.30 P. M. Dr. Morris will read a paper on "Delivery of the Shoulders," and Dr. Miles will report cases. *Clinical Society* will meet Friday, November 4th, at 8 P. M. Dr. C. Johnston will read some notes of his visit to Europe. *Medical Association* will meet Monday, November 14th, at 8 P. M. Dr. Williams will open the discussion; November 28th, Dr. Perkins. *Obstetrical and Gynecological Section, Medical and Surgical Faculty of Maryland* will meet Friday, November 25th, at 8.15 P. M. Dr. Morris will report a case of congenital atresia vaginæ. *Medical and Surgical Society* meets every Wednesday at 8.30 P. M.

ANNUAL MEETING OF THE CLINICAL SOCIETY.—The annual election of officers in the Clinical Society of Maryland took place at the Medical Hall, 122 W. Fayette Street, on the 21st of October, with the following result: President, I. E. Atkinson; Vice-President, Samuel Theobald; Recording Secretary, J. H. Branham; Corresponding Secretary, Randolph

Winslow; Reporting Secretary, Eugene F. Cordell; Treasurer, Thomas A. Ashby; Executive Committee, J. Edwin Michael, L. McLane Tiffany, and O. J. Coskery. On taking the chair Dr. Atkinson made some well-timed remarks with reference to the objects, work and prospects of the Society. The corresponding secretary announced that the membership of the society embraced 128 names, 33 of which had been added during the year. The treasurer was directed to make a further deposit of \$50 in bank to the credit of the society. Resolutions were also adopted to have the society incorporated, and to have the constitution and by-laws printed, with a list of the members. Thus enters this vigorous young society upon the seventh year of its career, with high aspirations and brilliant prospects.

CANCER OF RECTUM; COLOTOMY.—*M. Trelat* says of this affection, that it is not very infrequent, he himself having observed six cases in Paris since the beginning of the year. It generally occurs in those advanced in life, but the author has seen it at fourteen and Allingham at thirteen. Being painless at the beginning it is not suspected, and it is usually treated as hemorrhoids. Ablation, the author thinks, ought to be practiced when the tumor is movable, even it be of large size, whilst if it be adherent to the bones it cannot be efficiently accomplished. Experience shows that after ablation, the patient will survive for a period varying from three months to two years. The author notices favorably the operation of rectotomy proposed as a palliative by Verneuil in cases where the superior extremity of the tumor is accessible, but ablation is impracticable from adhesions to the pelvic walls, the object being simply to evacuate the overloaded rectum and prevent imminent peritonitis. The last resource is to create an artificial anus; this should be made at

the lowest possible point, i. e., the descending colon. There are two points at which colotomy may be practised; first, inguinal, on the anterior part of the abdomen, four-fifths inch above Poupart's ligament on the left side; second, lumbar, on the posterior and lateral part of the left flank, at a point where the colon is not covered by peritoneum. The latter is to be preferred for several reasons: (a) the back is the natural seat of the anus; (b) it is much easier to wear a retaining apparatus behind than in front; (c) it is probable that the patient survives longer after the lumbar operation than the other; (d) it is an extra-peritoneal and hence a much safer operation.—*Gazette des Hopitaux*, Oct. 11, 1881.

THE Hospital Relief Association of Maryland is urging the introduction of "Hospital Sunday" into Baltimore.

MEDICAL ITEMS.

It is reported that a movement is on foot for the establishment of another Woman's Hospital in Baltimore. = Pasteur went to the French coast to study the nature of yellow fever, but after waiting vainly for a fresh case to arrive from Africa, had to return disappointed to Paris. = Dr. St. George W. Teackle has been appointed by the Governor a member of the State Board of Health. = Dr. A. D. Pair, of North Carolina, a graduate of the College of Physicians and Surgeons, 1881, has been appointed Assistant Resident Physician at the City Hospital vice E. George Keitt, of S. Carolina, resigned on account of health. = Dr. T. Addis Emmet was elected President of the American Gynecological Society for the ensuing year.

ADVERTISING NOTICES.—*Be sure to read the advertisements contained in this Journal. They contain notices of new preparations, new instruments, hospitals, colleges and other items of interest to the profession.*

In corresponding with advertisers be kind enough to mention the Maryland Medical Journal.

Powell's Beef, Cod-Liver Oil and Pepsin.—This preparation has received the endorsement of many leading practitioners as a valuable agent in the treatment of phthisis, especially when complicated with poor digestion. It is highly nutritious, easily digested and agrees well with patients who are often unable to take cod liver oil in its simple form. Give it a fair trial. The proprietors only ask that the preparation shall be judged upon its own merits. They claim that it is made of the best materials, by scientific processes, and that the combination is a permanent one.

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Quinquina.—This excellent substitute for quinia continues to grow in the good opinion of the profession. The proprietors and manufacturers, Charles T. White & Co., of New York, have recently sent to us a pamphlet of testimonials and reports from a large number of physicians. This pamphlet will be mailed to any address upon application. Quinquina is worthy of careful study and trial and it will not disappoint those who are in practice.

MARYLAND MEDICAL JOURNAL:

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

EXTERNAL RECTOTOMY IN BENIGN STRICTURE OF THE RECTUM.

BY RANDOLPH WINSLOW, A. M., M. D.,
Demonstrator of Anatomy, University of Md.
(*Read before the Clinical Society of Maryland,*
November 4th, 1881.)

Few affections are more distressing to the patient, or more dangerous to life, than stricture of the rectum. Its most common causes are simple inflammation, dysenteric ulceration, traumatic lesions, chancroid, tertiary syphilitic gummata and cancer. As external rectotomy is only available for benign strictures, I will omit all consideration of cancer of the rectum in this paper.

The treatment of benign stricture is palliative and radical. Life may sometimes be indefinitely prolonged by palliative measures, such as the regulation of the bowels by laxatives, enemata and suitable food—and it is surprising how small an opening will suffice for evacuation of the feces, if proper measures are taken to render the movements liquid—but the tendency of all strictures is to further

contraction, and in the end operative procedures are almost always required. For many years the use of bougies, with or without multiple incisions, has been mostly relied upon, and frequently with a marked amount of success; but this method is painful, and causes much spasm and irritability of the sphincters, and is not free from danger, as several instances of fatal perforation of the bowel have been recorded. For these reasons Van Buren is led to remark: "The value of the bougie as a remedy for stricture has been over-estimated. * * * It certainly has in many instances prolonged life, in some cases almost indefinitely, by counteracting, so long as it has been assiduously employed, the tendency to contraction and entire obstruction; but in tubular, fibrous or cicatricial strictures I doubt if its use has ever effected a radical cure." By radical cure is meant the restoration of the normal condition of the gut, without any tendency to re-contraction after the discontinuance of the use of the bougie. This desirable result cannot be obtained by the use of the bougie, except in some of

the thin linear strictures, and the treatment must be continued indefinitely.

Dilatation by means of hydraulic pressure has not met with much success, nor is the operation of divulsion to be recommended, as in both of these methods it is impossible to regulate the amount of force exerted on the stricture, and there is danger of fecal extravasation and of peritonitis.

Colotomy must always be considered the dernier resort, and should never be performed until all other means have been exhausted, for it is attended by considerable danger, and is withal a disgusting and offensive operation. It is, however, a very valuable method in some conditions, and when the stricture is situated high up it may be the only loophole for escape. External rectotomy is offered as a substitute for the above-mentioned methods, and is considered to be not only as safe, or safer, than any other operative procedure, but to hold out a better prospect of a radical cure. By the terms external, linear, or vertical rectotomy, is meant a complete longitudinal division of the stricture, the portion of the rectum below it and the anus down to the sacrum and coccyx. These terms are in contradistinction to internal rectotomy, which means incision of the stricture within the rectum without division of the rectum and anus. From Dr. Van Buren's book I learn that Mr. George Murray Humphrey, of Cambridge, England, is entitled to the credit of having first proposed this operation, and performed it himself for the first time, in 1852, with marked benefit to the patient. Mr. Humphrey was led to adopt this method by observing the good results following longitudinal incision of urethral strictures. The next surgeon to take up this operation was Verneuil, of Paris, who employed it successfully in 1863 and many times subsequently. Mr. Allingham, of England, and Dr. Van Buren, of New York, are earnest advocates of

the operation. The section of the rectum may be made with the ecraseur, thermo-cautery, or what is usually more available than either, the knife. Verneuil seems to have employed the ecraseur in his operations, whilst Van Buren gives a decided preference to the thermo-cautery, which is not only less liable to cause hemorrhage, but leaves the cut tissues charred, hence not so likely to be followed by septicæmia. Mr. Allingham always uses the knife, and remarks: "One thing I have learned in my long practice—not to fear any hemorrhage from the rectum." One point deserves to be emphasized: whatever instrument is employed let the division be complete! When fistulous tracks are present extending above the stricture, one or more of them may be utilized for the division of the stricture, but when no fistulæ are present an incision is generally made in the middle line, which is in the best position for free drainage and at the same time causes less hemorrhage. Dr. Van Buren prefers a lateral section of the sphincters to the median, as he has noticed that the median incision is slower in healing. The sphincter should be divided first, as in that way the stricture can be more readily reached. When the ecraseur is used it will be necessary to introduce a needle or a trocar in front of the coccyx and pass it externally to the rectum until it is beyond the stricture, when it is to be forced into the bowel and the chain or ligature passed. The wound left after division of the parts is somewhat conical, increasing in depth as the external surface is approached. The free division of the anus has the great advantage over the internal rectotomy, that besides allowing free drainage and the more ready escape of feces, the cut surfaces are not constantly fretted by the contractions of the sphincter, and repair is accomplished painlessly and rapidly. It must be remembered that the upper

portion of the rectum, which is about four inches in length and constitutes one-half of the whole of the tube, is almost entirely surrounded by peritoneum and is connected with the sacrum by a distinct meso-rectum. The peritoneum extends further down into the pelvis anteriorly, than posteriorly, hence the posterior median incision may be practised for all strictures situated within four inches of the surface, but when the disease is higher up the intestine I do not believe it is safe to divide the stricture, and should prefer colotomy.

My experience in this operation is limited to two cases, whose histories I will briefly relate.

CASE I.—H. M., female, about 35 years of age, married, has been pregnant three times, but carried none of them to term; all of them were still born, and were said to be puny, miserable creatures. Three years ago she swallowed a peach-stone, and does not know whether it passed. About this time she began to have pain and difficulty in defecation, and finally became unable to have an evacuation without taking a laxative. The number of premature labors of this woman, together with her general appearance, naturally suggested syphilis as the cause of her trouble, and this suspicion was heightened by the fact that her husband had had a sore upon his penis, for which he used mercurial ointment. An examination revealed ischio-rectal abscess, fistula-in-ano, external hemorrhoids, recto-vaginal fistula, and a tight stricture of the rectum extending from just within the anus up the bowel a distance of $3\frac{1}{2}$ to 4 inches. The stricture would not admit even my little finger, but allowed a No. 8 urethral bougie to pass easily. On September 11th, 1880, at the suggestion of Dr. Tiffany, I excised the piles, laid the abscess freely open, and split the stricture, including the anus down to the coccyx. As the upper end of the stricture was very high up, I feared

opening the peritoneal cavity and did not divide it as freely as in other portions, yet it was divided very freely in all parts. There was only a moderate amount of blood lost by the operation. The subsequent treatment consisted of an abundance of milk, eggs and other nutritious food. Morphia was administered for a short time, and iod. potass. gr. x three times a day. The local treatment consisted in keeping the parts clean and disinfected. The temperature never rose higher than 100° . Pain ceased immediately and sleep, which had been long absent, returned, her appetite reappeared and she soon began to gain flesh. Previous to the operation she had been bed-ridden for a long time, suffered much pain, had no appetite and emaciated greatly. She made a good recovery and was soon able to attend to her work. She had control of her feces except when she had diarrhœa.

I have had no opportunity to examine this woman since her recovery from the operation, hence cannot tell what is her present condition. I learned she had an attack of constipation this summer, which was relieved by medicine, but do not know whether it was due to a recontraction of the bowel or not.

CASE II.—E. A., married female, 23 years of age, was admitted to the University Hospital on January 8th, 1881, for treatment for recto-vaginal fistula. She dates her trouble from a kick on the perineum received from her husband a year or more previous to entrance. Besides the passage of pus and feces through the vagina, she suffers much pain in defecation. Her general condition was considered to be unfit for an operation, when she was admitted. Subsequently hemorrhoids developed and a large ischio-rectal abscess, which was opened and a large quantity of pus escaped. On July 11th I made an examination, and found a small recto-vaginal fistula immediately behind the sphincter

ani muscle, which would not admit the index finger. A fistula-in-ano was also detected, and an ulcerated and strictured rectum. The stricture reached about 3 inches up the bowel, and was large enough to admit the index finger. Great pain was experienced during the examination from the ulcerated and inflamed condition of the rectum. The gut above the stricture was soft and healthy. Hoping to cure both the fistula and the stricture at one operation, I divided the fistula completely. The wound healed in about two weeks, and her condition seemed to be improved; but as the original trouble was not cured, I again operated upon her on August 11th,—at this time I pared the recto-vaginal fistula and united its edges by silver wire, and then divided the stricture, rectum, and anus deeply in the median line, and made a shallower incision into the anterior face of the stricture. Incessant vomiting followed for days, due to the chloroform, and she became reduced almost to the last extremity, but it finally ceased, and she began to gain strength and appetite. The wires cut out during the violent spells of nausea, without benefitting the recto-vaginal fistula, but the result of the rectotomy has been most satisfactory. Her evacuations are painless and unobstructed. She has a fine appetite and has gained much in flesh and strength, and is again able to do housework. It is not yet time to say what effect the operation has had upon the size of the rectum, or to state that the stricture will not again contract and give trouble, but I believe she has already gained more than could have been accomplished by any other operation, except colotomy, and without the annoyances and dangers of the latter operation. It would have been impossible to have used bougies in this case, as the gentlest manipulation caused much pain and was always followed by bleeding. Local applications had been employed without any benefit.

MANAGEMENT OF THE SHOULDERS IN LABOR.

BY JOHN MORRIS, M. D.

(A paper read before the Baltimore Academy of Medicine Nov. 1st, 1881).

I have been led to write a short paper on the management of the shoulders in labor, for the reason that I discover that lacerations of the perineum very frequently occur after the safe delivery of the head. This accident has recently occurred to two of my friends in a single week. In both these cases the head had been safely delivered with the forceps. In one of them, indeed, I had myself assisted the gentleman in attendance in delivering the shoulder presenting anteriorly, and yet the perineum was torn to a considerable extent in the delivery of the remaining shoulder. This looks like faulty midwifery, yet we are told by all the authorities on the subject that such instances are of very common occurrence. Any suggestion, therefore, which tends to obviate this unpleasant accident must, it seems to me, have a practical importance.

I have never met with a case of ruptured perineum in my own practice, which embraces two thousand midwifery cases. I do not know whether this is owing to good fortune or to the means which I invariably adopt in all cases which I am called on to attend. Of course I have met with slight lacerations of the fourchette, but not of sufficient seriousness to require surgical interference.

In the "Transactions of the Medical and Chirurgical Faculty" for 1877 there will be found an article of the writer on the management of the perineum during labor. In that article I mention the various means necessary to be employed to protect its integrity. I there state that the proper plan is, before the head actually commences to impinge on the soft parts, to pass the finger round the whole surface of the perineum, inside, during

the pain, and attenuate the tissues by drawing them downwards and backwards. This kind of *massage*, so to speak, is of great service in preparing the perineum for the severe strain it is about to undergo. When the pains are of a violently forcible character it is necessary, of course, to guide the head and control its movements; but if the soft parts be properly prepared in the manner I have suggested, the perineum may be readily slipped under the chin, and the term of the labor thereby greatly shortened. I might now suggest, in addition, the proper management of the glottis and the extension of the left leg at this stage to produce relaxation of the sphincters. The abduction and flexion of the limbs are proper until the soft parts are completely stretched; then the extension of the left leg adds to the safety of the perineum by its relaxation and the increase in the degree of its inclination. These remarks apply more particularly to the management of the head, but they also have a bearing, as you will see hereafter, on the delivery of the shoulders. A great rest usually takes place after the delivery of the head, particularly in primiparæ. The young obstetrician at this stage awaits anxiously for a renewal of the pains and sees with horror the face of the child becoming livid. Fearful for its safety, he immediately commences to pull on the head forcibly downwards and backwards. A sudden and violent pain is excited by his efforts; the sphincters contract and the shoulders are suddenly expelled, tearing the perineum in their rapid course. I have seen this occur in the Rotunda Hospital, Dublin, and also several times in this city. It is not good practice at any time to draw upon the head. Among other *contre temps*, I have seen the head torn away from the body by futile efforts to deliver the shoulders in this manner. The proper plan after the delivery of the head is to

rotate the shoulders in the reverse direction to that taken by the face, so as to bring them into the opposite oblique direction to that of the head. This rotation can be assisted by placing one hand upon the back of the neck and another upon the sternum as the shoulders are about to pass. The better plan, however, and the one I always adopt in cases of primiparæ, is to deliver each shoulder separately. After the proper rotation of the shoulders, which should be done very gently, I pass two fingers up into the axilla of the arm presenting at the pubis, gently depressing the head in this movement. I then raise the head up towards the abdomen of the mother, and in a like manner deliver the remaining shoulder. The first shoulder should, if possible, be delivered before the pains re-commence, after the delivery of the head. If I do not succeed with two fingers I do not hesitate to pass the whole hand and draw down the arm. This is sometimes a little painful to the mother, but it invariably saves the perineum. The great frequency of rupture of the perineum by the shoulders is due to the fact that they are too often disregarded in the management of the labor. The head being delivered without injury to the soft parts, the accoucheur thinks all difficulty is over; but this is a very great error. The shoulders form abrupt stumpy projections which are very apt to cut the attenuated parts if not properly watched and controlled. I have not, in what I have written, given any attention to the treatment of those cases in which the great size of the shoulders arrests the delivery before the head is born, for the reason that this branch of the subject has been ably treated by a French gentleman, M. Jacquemier, in an excellent paper published some years ago.

I have spoken of the proper management of the glottis as a means of saving the perineum. Tyler Smith is

the only author who dwells sufficiently on the importance of this matter. The more outcry the woman makes at the terminal stage of labor—that is when the head and shoulders are about to pass—the better. The extreme dilatation of the glottis adds to the safety of the perineum by the relaxation of the sphincters which it produces. The woman, therefore, should be encouraged to cry out at this crisis. Her very distress seems to be the means devised to save her from future injury.

Unfortunately, in our times, it seems that more pains are taken to look for injuries to the perineum than to guard against them. The whole system of midwifery formerly taught in the schools has been reversed by modern practice. The gynecologist appears to have taken the place in a great measure of the obstetrician. Women are now turned up and examined immediately after delivery in the search for lesions of the *genitalia*. I was greatly surprised at a meeting of the Obstetrical Section of the Medical and Chirurgical Faculty, last week, to discover that this practice is the unvarying rule of every member who was present. The old masters of midwifery would have looked with horror upon procedures of this character, and I beg leave as one of their pupils to protest earnestly against this unnecessary, if not indelicate, innovation.

I have thus briefly suggested the plan which I think best to be employed in the delivery of the shoulders, in the hope that the subject may excite the attention of the Academy and elicit the views of the members engaged in the art of obstetrics.

There is a case related of a woman who nursed her child for three years from a nipple on her thigh, and the child, after becoming able to walk, would stand up beneath its mother's clothes and nurse.

LUMBAGO AND OTHER PAINFUL LOCAL AFFECTIONS TREATED BY SUCTION.

BY H. T. RENNOLDS, M. D., BALTIMORE.

(Read before Med. and Surg. Society, Nov. 2, 1881).

I wish to add a little rivulet to the great sea of Therapeutics. It is small but not unimportant as, I hope, others may be pleased to demonstrate to their entire satisfaction.

With the abandonment of the lancet, cupping and leeching have also fallen into disuse; the pendulum has swung to the other extreme. This is, no doubt, owing partly to the inconvenience attending their application. It is repugnant to physician and patient to be compelled to employ a barber, especially in treating women of refinement. By the expedient here suggested the dilemma may, in a measure, be obviated. The great pleasure I have had in the use of a simple means of cupping induces me to present this addition to our resources.

For two years I have employed the Uterine Pump, (see Thomas's Dis. of Women, 1872, p. 605) a tube of hard rubber six inches long and three-fourths to one inch in diameter, with a tightly fitting piston provided with a set screw, which I have added. I have used it for lumbago, acute and chronic, intercostal neuralgia, pleurodynia, chronic pleuritic pains, myalgia, local congestions of lungs, ovaries, etc., torticollis and analogous difficulties for which we have, in most cases, no efficient or speedy relief. It is the counter part of the hypodermic syringe. Liniments, blisters and electricity generally fail and we or our patients do not consider the cases important enough for dry or wet cupping or leeching with the barber thrown in. My mode of using the instrument is to place it over the seat of pain, depress the piston to expel the air, then draw it out slowly and steadily and keep it out by means of the set-screw.

It is left applied from two to five minutes or until the pain is relieved, which seldom occupies a longer time. If the pain extends over a larger area, the instrument can be placed at two or more points successively.

It will not at all take the place of ordinary cupping over extensive areas of acute congestion, but in the class of cases I have mentioned, I assure you after extensive experience that this convenient instrument properly applied offers more speedy and decided relief than any means at present in use. These smaller ailments are the cause of more aggravation to patients and physicians than many more important affections. If you wish to abstract blood, puncture with the lancet after producing congestion and re-apply your suction.

In illustration of its efficacy I will briefly mention one or two cases.

A young man came to my office suffering from intercostal pains which had kept him from his employment for five days. I applied the instrument and gave him such complete relief that instead of going home, as he had intended, he went to his work, and had no return of pain. He had used liniments and mustard plasters without any improvement.

Some time ago a stalwart man came to see me who had severe lumbago from which he had suffered for two weeks; every motion gave him pain and I could but pity his agony as he rose from a chair to go into an adjoining room. I placed the cup on both sides of the spine for some eight minutes, the suction being so strong as to draw blood through the unabraded cuticle. The relief was so complete that he voluntarily remarked: "Why I feel so easy I could pick up a pin off the floor,"—suiting the action to the words.

Almost daily while physician to the Eastern Dispensary I saw patients enter in agony and leave in a few minutes laughing. Many patients

who had endured pains for months were relieved after one or two applications.

A medical friend who witnessed the treatment of many of these cases has had equal satisfaction with myself in the treatment of these otherwise troublesome disorders.

The pain produced by the instrument though sharp is insignificant compared with the relief afforded.

As to the instrument the only point I would insist upon is a tightly fitting piston. It can be purchased at the instrument maker's for about two dollars.

A HUMAN HEART ON THE RIGHT SIDE OF THE BODY.

BY J. G. WILTSHIRE, M. D., BALTO., MD.

The best opportunity—indeed, we may say almost the only one—for the observance of disobedience of the laws that our Maker has established for the anatomical construction of the human body, is afforded the student in the dissecting-room, a fact that I had verified during an experience of seven years in the dissecting-rooms of the "College of Physicians and Surgeons" of this city. And in all cases where I found anomalies it invariably followed, as a law, that others co-existed. All were interesting to the student and useful to the surgeon; but I will be content with calling the attention of the profession to a subject in which the heart was found on the right side of the thorax; one that was discovered and worked up by Mr. C. D. Evans, a student of the class of 1878-9, who very kindly made me a correct drawing of the misplaced organ and its relations, which I shall take pleasure in preserving and valuing for its worth as a representation of a curious piece of anatomy, to say nothing of the many pleasant memories that hang around it.

The subject in which the unusual anomaly that we have under consider-

ation existed was that of a negro man of fine physique; muscles were hard and well developed, showing nothing that pointed to his having died of any chronic disease; this, however, I cannot establish beyond doubt, besides it is of little interest to us and has little bearing on the case.

The heart was, as I have said before, found on the right side, with its base at the proper level, corresponding with the upper borders of the third costal cartilages, with its apex pointing to the right, resting on the diaphragm at a point corresponding with the space between the fifth and sixth ribs. It was normal in size and appearance, and had apparently taken this position in its cavity without any agent to determine the misplacement.

From the left side of the heart the arch of the aorta came off and in every way behaved as it ought to have done, save in giving off its branches. The arteria innominata was wanting, its branches coming off from the arch in the order in which I give them.

The right common carotid arose from the upper face of the transverse part of the arch, where it begins to descend toward the third dorsal vertebra and then it ascended, in front of the trachea, to the right side of the neck to its usual point of bifurcation into the external and internal carotids; the former gave off no branches until it reached a point opposite the symphysis of the chin, where a short axis was thrown off, from which the facial, lingual and superior thyroid arteries arose. The latter (internal carotid) presented nothing that was at all irregular in its behavior.

The left common carotid artery was derived from the outer face of the descending part of the arch and ascended, upon its old bed, to its usual point of bifurcation, acting as did its fellow on the opposite side.

The left subclavian arose from the descending part of the arch of the aorta, at a point where it crosses,

and passed upward and outward to its usual line of passage to the anterior border of the first rib (Wilson). My notes do not show that this branch furnished any anomalies; I think, however, its distribution was in every way normal.

Nothing more occurred to the arterial tree to interest us until it passed into the abdomen, where the celiac axis came off from the posterior face of the aorta and passed to the right of the latter to its front, where the hepatic, gastric and splenic arteries were given off. There were two renal arteries on the right side, whereas there was only one on the left.

CLINICAL LECTURE.

HERPES ZOSTER OR SHINGLES.

BY GEORGE H. ROHÉ, M. D.,

Clinical Professor of Dermatology, College of Physicians and Surgeons, Baltimore.

GENTLEMEN:—The case I now show you presents a beautiful example of a disease which is not very frequent, and yet which is seen often enough to be well known even to the laity. It is called herpes zoster, zona, or shingles. This man, as you see, has a broad band of well developed vesicles situated upon a red inflamed base and extending on the right side from the spine to the linea alba. On the left side there is no appearance of any similar eruption. If you will notice the case a little closer you will observe that the vesicles are arranged in clusters, and if you will take your Wilson's or Gray's anatomy, when you return home to-day, you will see that these clusters correspond to the areas of distribution of the peripheral terminations of the ninth dorsal nerve of the right side. This is a matter of some importance, and I want you all to bear it in mind. In all cases of zoster which you may see you will always be able to trace out the areas

of distribution of some of the cerebro-spinal nerves by the distribution of the eruption. Presently, when I come to speak of the pathology of the affection, you will see why this is so.

On looking at the patient again, I find that his body is covered by a reddish-brown eruption, slightly elevated above the surface, and covered by small scales. It looks like a papular squamous syphilide, and on examining his penis, we find an indurated spot on his prepuce and the inguinal glands enlarged. On inquiry I learn that he is now under anti-syphilitic treatment.

I do not think the syphilis has any connection with the herpetic eruption. The occurrence of both in the same subject is probably merely a coincidence.

The history of a case of herpes zoster is usually this: After a few days of slight fever, an eruption of small erythematous spots appears along the course of one of the cutaneous nerves. The eruption is generally preceded by a neuralgia, sometimes very severe, for several days. In other cases the pain is entirely wanting. Small papules soon appear in the centre of the spot, which develop into vesicles. These are often umbilicated like small-pox vesicles. You remember that when speaking of the anatomy of vesicles, I said that umbilication was not peculiar to the vesicles or pustules of small-pox, as stated by some writers. In the course of a week the vesicles dry into thin crusts, or change into pustules. In two to three weeks the crusts fall off, leaving pigmented spots or superficial scars to mark the site of the eruption.

The cause of herpes zoster is still a matter of considerable uncertainty. The regularity of distribution of the eruption and the severe pain first led to the thought that it might be attributed to nerve trouble. As zoster is rarely or never fatal, opportunities for autopsies rarely occur. In a few

cases, however, in which patients died of intercurrent affections while suffering from zoster, careful *post-mortem* examination revealed hyperæmia or inflammation of the corresponding cutaneous nerves in continuity, or some structural alteration—inflammation or apoplexy—in the ganglia. But when we endeavor to go “behind these returns” and ask what causes the neuritis, the question is not easily answered. In some cases it is traumatism; thus zoster sometimes occurs in consequence of injury to the cutaneous nerves or ganglia. It may also occur in cases of serious lesion of the cerebro-spinal centres. It has sometimes been observed along the course of the affected nerves in the severe pains of locomotor ataxia.

In the majority of cases no cause for the disease can be given but the very indefinite one, “a cold.”

Zoster is a self-limited disease; it will usually get well in three or four weeks without any or in spite of any treatment. You cannot cut it short or ‘abort’ it. It will run its course to the end in spite of remedies. It rarely occurs more than once in a lifetime, resembling in this respect, very much, the specific fevers. Sometimes it seems to prevail in a limited section of country as an epidemic, while at other times not a case will be seen in the same area for years.

From a consideration of these facts, I have been led to conclude that herpes zoster may in some way be related to the acute specific diseases. It certainly bears considerable analogy to whooping cough, mumps, epidemic roseola and cerebro-spinal meningitis, which are all classed in this category now.

Sometimes the neuralgia persists for weeks, months, and even for years after the disappearance of the eruption.

If you will remember the appearance and distribution of the eruption, the prodromic neuralgia, the course of the disease and its limitation to one

side of the body, generally, you will have no difficulty in making a diagnosis.

The prognosis is favorable. There is a very widespread opinion current among the laity that if a belt of "the shingles" crosses the middle line of the body and extends to the other side, or if it is bilateral, the disease will certainly be fatal. This notion, though frequently disproved by cases of bilateral zoster which did not terminate fatally, has persisted for nearly two thousand years in the medical prognostics of the people.

The treatment is extremely simple. We will apply something to protect the vesicles against accidental injury from friction of the clothing or otherwise, and the best thing for that is cotton batting.

The vesicles will be covered by a layer of cotton batting, which will be kept in place by a few turns of a roller bandage. He suffers intensely from the pain, and for that we will give him one-fourth of a grain of sulphate of morphia every four hours, or oftener if necessary. Phosphide of zinc in doses of one-eighth of a grain three times a day has been highly recommended for the relief of the pain, but in a case in which I tried it, I met with no success. You may apply a dusting powder of precipitated chalk and oxide of zinc, with a little morphia, to satisfy the patient that you are doing something for him.

If the neuralgia persists after the disappearance of the eruption, you may use hypodermic injections of morphia or atropia, or the two combined over the track of the nerve. The constant current may also be used with success in chronic cases. In obstinate cases stretching of the affected nerve promises good results. Of course, I need hardly mention that if your patient is anemic or dyspeptic you will give him the remedies appropriate in these conditions. By thus bearing in mind the general condition of the patient you will oftener

succeed in curing a neuralgia, whether primary or following zoster, than if you paid attention to the local trouble alone.

CORRESPONDENCE.

GULF-WEED IN EPILEPSY AND OBESITY.

I was consulted sometime ago by a young woman who was suffering from epilepsy. She was very fat. I prescribed powdered extract of gulf weed, two grains every two hours, supposing that the excessive accumulation of adipose tissue in some way was the cause of the epilepsy, as she was only subject to the attacks since she became corpulent. I ordered the liberal use of milk and a diminution of the ordinary quantity of solid food. I saw her again in about two months and was gratified to find her slender in form and presenting all the appearances of health. The epilepsy had disappeared with the adipose tissue. She had followed the directions to the letter during the two months.

The powdered extract of gulf-weed is not to be confounded with the *fucus vesiculosus* of sea-weed; it is an entirely distinct plant. I have frequently prescribed it in other cases of epilepsy, but the results have not been as satisfactory as when the cause seemed to be corpulence. It is a sovereign remedy for corpulence. By vigorous dieting, milk in large quantities, and salted food in small, we have in many cases reduced weight at the rate of one pound per day and the patient seemed to gain in strength and activity.

I think this treatment surpasses all the anti-fats that I have tried or heard of. The duration of the treatment will vary in different cases. When the desired effect begins to show itself, it continues even after treatment is suspended.

M. MILTON.

Bradford, Pa., Oct. 27, 1881.

SOCIETY REPORTS.

BALTIMORE MEDICAL
ASSOCIATION.

STATED MEETING HELD OCT. 24TH, 1881.

(Specially Reported for the Maryland Med. Journal).

JAS. A. STEUART, President, in the Chair.

SPECIMEN OF TUMOR FROM UTERUS, SUPPOSED TO BE PLACENTAL.—*Dr. Morris* exhibited a specimen obtained from a multipara, æt. 49, who had menstruated regularly up to the present time. Her last child was born about six years ago. For the last four or five months she has had uterine hemorrhages. Last week *Dr. M.* had dilated the os with tupelo tents; after the introduction of the second tent the pulse went up to 145 and temperature to 102.5°. Quinine and antiseptic injections were employed. Two days later (yesterday) after large doses of ergot, and strong pains, this fleshy mass presented at the os, and was extracted with placental forceps. *Dr. M.* had not examined the tumor but took it to be a fleshy tumor consequent on the vitalization of the placenta in the case of a blighted ovum. Tumors of this character sometimes occur at this time of life. To-day the pulse is 92 and temperature normal.

After an examination and dissection of the tumor, *Dr. Ashby* said that the specimen felt like a fibroid; if it were the remains of a vitalized placenta it would be friable, if a blighted ovum there would have been some evidence of pregnancy. The age of the patient also militated against the latter supposition.

HERPES ZOSTER FACIALIS.—*Dr. Ashby* reported the case of a gentleman 83 years old, upon the left side of whose head a quantity of minute vesicles suddenly appeared. They followed the distribution of the supra-orbital branch of the fifth nerve. Intense pain ensued, which required the frequent use of hypodermic injections of morphia for its relief. The affected parts were very tender, and being of a scarlet color presented an appearance very much like erysipelas. But that he had previously seen a similar case he would have mistaken it for that disease. The exciting cause in this case was supposed to be cold acting upon

a very debilitated subject. The patient obtained great relief from the application of chloroform and olive oil. The disease ran its course in ten days.

PHYSICAL EDUCATION.—*Dr. Jos. T. Smith* read a paper on this subject, the importance of which, he said, was not yet fully appreciated, notwithstanding the great advances hygiene and preventive medicine have recently made. Parents never inquire as to the training of the bodies of their children but only as to the mental instruction they are to receive. The gymnasia occupy a position of scarcely any consequence at all in the college course. In order to obtain the benefits which they are capable of rendering, two things are necessary; first, compulsory instruction; second, competent instructors. As much ability is demanded and should be accorded in this department as in that which relates to the training of the intellect.

SECTION ON OBSTETRICS AND
GYNECOLOGY, MEDICAL AND
CHIRURGICAL FACULTY OF
MARYLAND.STATED MONTHLY MEETING HELD SEP-
TEMBER 23RD, 1881.*(Reported for Maryland Medical Journal).*

The Section met at the usual hour; present the Chairman, *Dr. Opie*, and *Drs. Erich, Williams, Griffith, Browne, R. Winslow, Branham and Cordell.* * *

The relation of cases being in order, *Dr. Winslow* exhibited a specimen of BLIGHTED OVUM WITH FLESHY DEGENERATION OF THE MEMBRANES (The case was reported in the MARYLAND MEDICAL JOURNAL, of Oct. 15th).

Dr. Erich said that the probe does not cause abortion unless it ruptures the membranes; he had seen some cases in which it had been introduced during pregnancy without doing any harm. Frequently in cases like *Dr. Winslow's* the foetus is not to be found, the foetal envelopes alone being present. Nature is not always competent to deal with these cases; he knew of one in which the ovum was retained for four months, the patient suffering meanwhile from severe hemorrhages. There is a great liability to mistakes of diagnosis during the first four months. The difference of

temperature may be of service in forming a decision.

INTRA-UTERINE THERMOMETER.—*Dr. Opie* exhibited a self-registering thermometer which he had had made for use in the uterus after labor. It was curved at the extremity and about the size of a No. 18 (Amer. scale) catheter. The uterine temperature is about one degree higher than that of the axilla.

Dr. Erich preferred the ordinary pocket thermometer, because smaller and less apt to do harm.

ABORTIVE ATTEMPT AT OVARIOTOMY; VENTRAL HERNIA FOLLOWS; EXHIBITION OF SPECIMENS.—*Dr. Bransham* exhibited the uterus, ovaries, &c., of a colored woman, aged 65, upon whom an unsuccessful ovariectomy was attempted sixteen years ago. In the situation of the opening then made (extending from the umbilicus to the symphysis pubis) a large hernial protrusion had appeared, twenty-five by fifteen inches in extent and projecting four or five inches from the surface of the abdomen. The hernia had very thin walls and contained nearly all of the intestines. The uterus was the seat of fibroid growths, which had partly undergone cartilaginous degeneration. The right ovary was normal; the left showed fibroid growth with some muscular fibre mingled with it. There was no evidence of peritonitis except in the sac.

Dr. Erich said that so serious an operation was not often justifiable in a solid ovarian tumor like the present one. The age attained by the patient shows this to have been true here. Fibroid degeneration is very common in old women; if they were examined few perhaps would be found to be entirely free from it.

Dr. Winslow, in dissecting the body of a colored woman, found fibroid tumors of the uterus. On lifting one of these it separated; the same would probably have taken place from a jar or sudden movement, but would probably have been harmless.

LABORS IN CONTRACTED PELVIS.—*Dr. Erich* related the following cases: (a) a patient with a narrow pelvis was attended by a midwife, who saturated her with ergot. Finding the head impacted in the pelvic cavity he applied

forceps and endeavored for one hour to extract. This proved unsuccessful, although the forceps held well, and he then perforated the head and delivered. The woman recovered; (b) abortion had been advised by physicians on account of narrow pelvis, which had necessitated previous craniotomy. He applied the forceps ineffectually; version was then resorted to with success, but the child died after a few gasps. Ergot had not been given in this case; (c) a woman was attended by a professional friend in her thirteenth confinement; in the last one of her previous labors craniotomy had been performed. In this, version was practised—the head could not be delivered, but was severed from the body. It could not be extracted without final craniotomy. The patient died from shock a few minutes after the birth; (d) a physician gave ergot; forceps then version was attempted, resulting in separating the head from the body. She had been repeatedly delivered with forceps; (e) the pelvis here was not uniformly contracted; it was a case in which version was indicated, according to the rules laid down. Accordingly the feet were seized and brought down, but the head could not be delivered without resort to the forceps. This experience had caused him to determine never again to turn in a case where much ergot has been given and the waters expelled; the forceps will then do all it is possible to do.

RETAINED PLACENTA.—*Dr. Opie* said—do we not depend too much upon examination of the membranes and placenta after delivery, as to proof of non-retention? In a case where the temperature and pulse were high and there was tenderness over the abdomen, he had introduced his hand on the third day after labor and extracted a piece of retained placenta; two days later the symptoms had all disappeared. In another case the result was similar. His experience embraces now thirty or forty such cases. He has no hesitation in thrusting his hand into the interior of the uterus when septicæmic symptoms occur after confinement, when there is any reason to suspect retraction, and believes that he has by this means arrested many cases of septicæmia.

Dr. Williams would act similarly, but

had not met many cases where this was required. Usually everything comes away during the labor. In case of retention, generally hooking away the mass with the finger is all that is required.

Dr. Erich said it had been established that apparent integrity of the placenta is no certain evidence of non-retention. Continued hemorrhage, after-pains and discharges, with increased temperature and pulse, point to retention.

Dr. B. Bernard Browne has never found it necessary to explore the uterus on the third or fourth day after labor for portions of the retained placenta, because it was his practice, and he thought it the physician's duty, to know that the uterus was empty immediately after labor. His practice was to introduce two fingers into the uterus, pressing gently on the abdomen with the other hand, and thus to remove clots and satisfy himself that no retention existed. The patient thus incurred much less risk than by leaving her to chance. Placentæ succedaneæ may be present. In a case related at the Clinical Society some time since, where typhoid fever had been diagnosed, *post mortem* revealed a large placental mass, 7 or 8 inches long, and 1½ broad, undergoing decomposition in the uterus. Firm contraction of the uterus was impossible in such a case. Examination in the manner described would have revealed its presence at the time of delivery.

Dr. Erich was in favor of introducing the entire hand into the vagina; the entire cavity could not be reached by the introduction of two fingers only into the vagina.

Dr. Browne would use the entire hand if necessary, but generally two fingers in the uterus suffice, for contraction of the organ takes place very rapidly after delivery, and it is very surprising what a small mass it makes when all clots and remains of the placenta are thoroughly removed after his method.

EDITORIAL.

HOSPITAL SUNDAY.—To the readers of the *Lancet* it is well known that for several years past there has been a day set apart in the year on which the collections of the churches of the British me-

tropolis were appropriated to the use of its hospitals. In the establishment of this custom the *Lancet* contributed, and the success of the movement is in no small degree owing to its influence and active coöperation. At present it is very generally observed, and the receipts amount now to over \$150,000 annually. In connection with the "Sunday," and in order to reach the large class of business men, who perhaps do not attend church, or else reside outside the city, a "Saturday" has also been set apart, and is known as Hospital Saturday. On this day collections are made among the merchants, brokers, &c., and this sum is added to that contributed by the churches. As for the distribution of the enormous amount thus accumulated—about \$200,000 this year—it is entrusted to prominent persons chosen with regard to their fitness for such duty.

There was so much to recommend this movement to public consideration and favor, that not many years elapsed before it was introduced into New York, and it there meets with much encouragement and increasing success. It is said also to have taken root in one or two other American cities. And now the Hospital Relief Association of Maryland, a charitable organization composed of ladies and gentlemen residing in this city, has taken up the movement and has resolved to introduce it here.

If there be justification for it in London, where the hospitals are rich and independent corporations, how much more here, where these institutions with difficulty manage to maintain themselves, and are in many cases unable, for want of funds, to provide those conveniences and comforts—not to say luxuries—which the sick require.

We have brought the subject before the members of the profession in this city in order to commend it to their sympathy and support, and to ask them to use the influence which each in his circle, to a greater or less degree, possesses, to introduce it to the notice of those with whom they are brought into association with such words of approval as may suggest themselves. No class of persons in the community appeal so strongly to our charity as the sick poor, and by aiding the hospitals we provide

better for their care in the time of their peculiar need.

Of the details of the movement it is not for us to speak, even if we felt qualified to do so. Much of its success will of course depend upon the character of the persons having it in charge, and especially those entrusted with the distribution of funds. This delicate and responsible duty should be confided only to persons of high character and broad humanitarian views, and possessing fully the public confidence. And in the bestowal of their charity the greatest possible latitude should be allowed to individual tastes and preferences, and the wishes of the donors as to the disposition of their funds should be sacredly respected. At the same time the broadest philanthropy should be encouraged, and men should be urged to lay aside their sectarianism for at least this one occasion and know no other divinity in their gift but disease and suffering.

However, the plan of operations, well considered in the light of the experience of our sister cities, will doubtless be made known in due time by the organization which will be formed, and as we propose to recur to the subject again, we will for the present await further developments.

LISTERISM IN OVARIOTOMY.—At the recent meeting of the International Medical Congress, a great deal was said in favor of and against Listerism by different surgeons who had employed the Listerian method. The experiences of the most careful and judicious authorities by no means agree. Keith, of Edinburgh, was forced to admit that after having a succession of eighty successful cases, he had five deaths in the next twenty-five cases, two from carbolic poisoning, one from septicæmia and two from acute nephritis. On account of this mortality he had abandoned the spray in all operations. Out of twenty-seven ovariectomies performed without the antiseptic treatment only one death had occurred.

As opposed to Keith's experience, Knowsley Thornton stated that since the 1st of January of this year, he had performed ovariectomy twenty-eight times, with the death of one patient. Every one of his operations was performed with

the $2\frac{1}{2}$ per cent. spray and solutions of absolute phenol, and in no case was drainage employed. All the wounds healed by first intention. Only two patients remained in hospital twenty-eight days after operation. In nineteen cases only one ovary was removed. Nineteen recovered without a temperature beyond 101° F; five had temperatures from 101.6° to 103.4° during a few hours; four had temperatures from 102.8° to 104.6° , and required the use of the ice-water cap during periods of from thirty-seven to sixty-eight hours.

To these twenty-eight cases Mr. Thornton added four cases operated upon in his ward by his colleague, Mr. Meredith, in which strict Listerism without drainage was also employed; all recovered. Here were thirty-two Listerian ovariectomies without drainage with only one death. Mr. Thornton had likewise performed eight other abdominal sections with one death or a total of forty abdominal sections with two deaths. There were no symptoms of carbolic poisoning in a single case.

SMALL-POX IN BALTIMORE.—The appearance of several cases of small-pox in Baltimore should be a sufficient warning to the Health Department and to the profession to institute prompt measures for the prevention of the spread of this loathsome disease. If due care be exercised it may be possible to limit the disease to the cases now suffering from it. The least negligence or indifference in enforcing vaccination, isolation and disinfection, will undoubtedly entail upon this community an epidemic similar in extent and virulence to those raging in other cities in the United States. With our present knowledge of the value of vaccination as the preventive of small-pox, there is no valid excuse for the prevalence of this disease in this or any country. It is a reflection upon our civilization that a disease should be allowed to exert its power where the means of its prevention are at hand. There is no scientific fact which rests upon a more secure basis than that vaccination is the preventive of small-pox. The exceptions to this assertion are too few to be considered. Knowing this, it is the duty of the civil authorities and of the

medical profession to insist upon and enforce the practice of vaccination in every community. Where small-pox has prevailed it has been in localities where inefficient measures were instituted to prevent its spread. With this fact before us nothing but criminal neglect upon the part of our Health Department or of the profession will occasion an epidemic in Baltimore. We would urge the importance of vaccination in every case, especially among infants and children and of revaccination in every instance where it has not been practiced within a period of two years.

REVIEWS & BOOK NOTICES.

A Text-Book of Physiology. By M. FOSTER, M. A., M. D., F. R. S., Prælector in Physiology and Fellow of Trinity College, Cambridge. Second American from the third and revised English Edition, with extensive notes and additions, by EDWARD T. REICHERT, M. D., Demonstrator of Experimental Therapeutics, University of Pennsylvania. Illustrated. Henry C. Lea's Son & Co., Philadelphia, 1881.

Wherever the English language is spoken Foster's physiology is known and esteemed. Few books have been accorded the friendly welcome and favorable criticism bestowed upon the first edition of this work. Its position as an authority and text-book is unassailable. We can only note the fact that in the preparation of this American edition the editor has carefully revised, re-written and added to the text such new material as will be found to represent all the recent advances in experimental physiology. His object is to bring the American edition fully up to the standard of the latest English edition and thus place the student in possession of all the facts which have been made known since the first American edition was published. The popularity of this work is shown by the fact that one large edition was exhausted within a year.

A Treatise on the Diseases of Infancy and Childhood. By J. LEWIS SMITH, M. D., Clinical Professor of Diseases of Children, in Bellevue Hospital Medical College, New York, etc. Fifth Edition thoroughly revised, with Illustrations. Henry C. Lea's Son & Co., Philadelphia, 1881. 8vo. Pp. 829.

Only two years have elapsed since the fourth edition of this work was given to the profession. We have now before us a fifth edition revised, rewritten and with much new matter introduced. The rapidity with which successive editions of this work have been issued attest its very marked popularity and usefulness to the profession. In fact the profession has learned to recognize this high authority as a thoroughly safe and trustworthy guide in all questions relating to the diseases of infancy and childhood, and to appreciate the author's effort to keep the work up to the requirements of the practice of the day. Whatever is new in pathology or treatment the author has added, and in order to more fully meet the wants of professional knowledge he has treated of a few additional diseases. A work so well and favorably known does not come within the reach of criticism. Our readers from former editions will be able to determine its value to them.

MISCELLANY.

FURTHER INVESTIGATIONS ON THE BACILLUS MALARIE.—It is well known that in 1879 Klebs and Tommasi-Crudelli announced the discovery, in the Campagna near Rome, of a microscopic organism, which they believed to be the cause of malarial fevers and which they termed *bacillus malarie*. Sternberg repeated their experiments early in 1880, under the instructions of the U. S. National Board of Health and his investigations, carried on in the suburbs of New Orleans, have recently been made public through the

National Board of Health Bulletin. He considers their evidence insufficient, (a) because the temperature curve in the rabbits operated on by them in no case exhibited a marked and distinctive paroxysmal character; (b) because healthy rabbits sometimes exhibit diurnal variations of temperature as marked as those in their charts; (c) because the changes in the spleen described by them are not evidence of death from malarial fever inasmuch as similar changes occur in the spleens of rabbits dead from septicæmia produced by the subcutaneous injection of human saliva; (d) because the presence of dark-colored pigment in the spleen cannot be taken as an evidence of death from malarial fever inasmuch as this is frequently found in the spleens of septicæmic rabbits.

NEW METHOD OF VACCINATION IN ERECTILE TUMORS.—M. Constantine Paul presented to the French Academy of Medicine a child whom he had cured of a large erectile tumor of the back of the neck by vaccinating it. His method was as follows: He covered the tumor with a layer of vaccine lymph, and then through this made punctures all over the parts which it was desired to affect. In this way uniform inflammatory action and cicatrization over the whole surface was secured. The pustule was three months in healing, and beneath the scar tissue there was still some subcutaneous erectile tissue, which led M.M. Gosselin and Blot to state that a cure was only to be expected in superficial tumors.—*Gaz. Hebdom.*

BULLET LODGED IN THE BRAIN FOR SIXTEEN DAYS—ITS REMOVAL—RECOVERY.—The ball entered the skull at the left parietal eminence. A probe was passed in three inches downward and forward, but the ball was not detected. As there were no bad symptoms expectant treatment was adopted. On the twelfth day dullness, anorexia,

delirium and escape of serum and pus from the wound appeared. On the seventeenth day the patient was etherized, and a V-shaped flap of the scalp laid back, disclosing the clean-cut circular opening ($\frac{5}{8}$ inch in diameter) made by the ball. Fragments of bone were removed, some from the brain. The ball was found imbedded one inch below the surface of the brain. It was brought to the opening by a blunt strabismus hook, but was so flattened that it could not be extracted until the opening was enlarged. No hemorrhage. The recovery was unaccompanied by any serious symptom. On the twenty-fifth day the patient was up and left hospital on the forty-ninth day. Two months after this he had continued well.—*Gay, N. Y. Med. Record, Nov. 5.*

NERVE-STRETCHING IN DISORDERS OF THE SPINAL CORD.—*Langenbuch* showed a patient, in whom Westphal had diagnosed degeneration of the anterior and lateral columns. The right sciatic was stretched, in the central more than in the peripheral direction. The patient was relieved of his tottering gait and of anæsthesia of both legs, the latter disappearing a few hours after the operation, which was performed three weeks before, and not having so far returned. L. also showed a patient who had been cured of frequent attacks of epilepsy, by stretching the median nerve. *Crede* cured a neuralgia permanently by stretching and section of the third division of the fifth nerve. *Langenbuch* avoids stretching the peripheral portion of nerves, especially the sciatic, for fear of tearing the branches. *Neuber* had seen a reflex epilepsy cured by stretching the median nerve. On the other hand permanent paralysis had followed stretching the sciatic for sciatica. *Langenbuch* had seen no paralysis in twenty-four cases of sciatic stretching.—*London Med. Rec., July 15.*

GENERAL RESULT OF PORRO'S OPERATION.—Prof. Simpson, of Edinburgh, concludes a clinical lecture on Porro's operation ("Cæsarean Hystero-Oöphorectomy") with the following general result: If we look at the general result of all the cases we have brought together, we see that 30 mothers were saved and 42 lost; and 57 children were saved and 14 lost; whilst the condition of the children in one of the cases is unknown. This gives a total of 87 lives spared and 56 lost. If the patients had been delivered by some of the head-crushing procedures, then all the 72 infant lives would have been sacrificed; and with the usual loss of about 1 in 5 mothers, there would have been at least 14 maternal deaths, that is to say, at least 88 of the 144 would have been lost and only 58 saved. The proportions would nearly have been reversed.—*Brit. Med. Journ.*

PROF. GERLACH, of Hanover, twelve years ago showed, with regard to the bovine variety of tubercular disease (*perlsucht*) that its infection can be freely introduced through the stomach if bits of tubercular organs be given in the food, or if the healthy animal be fed with milk from the animal which has tubercle. I have every reason to believe that Prof. G.'s experiments are being extensively parodied by commercial experiments upon the human subject. I learn on what I believe to be the highest authority that tubercle is a malady which abounds among our cows, and that so long as the cow continues to give milk no particular scruple seems to prevent a distribution of that milk for popular use. To the persons who consume that milk (numbering tens of thousands) an important question as to the causability of tubercle is put in an experimental form.—*Simon's Address, Int. Med. Congress.*

THE ACID OF THE GASTRIC JUICE.—Bidder and Schmidt have proved by

an unimpeachable method that it is free hydrochloric acid which gives rise to the acid reaction of the gastric juice. They estimated the entire chlorine and the entire bases, reckoning these all as chlorides, in a measured quantity of gastric juice, and found more chlorine than would be necessary to convert the bases into chlorides. This overplus of chlorine can exist only as hydrochloric acid, free or in an organic combination. But the excess of chlorine corresponds to the equivalent of an alkali (Barium,) which must be added to the same quantity of gastric juice as was used in the experiment up to neutralization; so it follows that, first, free hydrochloric acid is present; and, second, other acids, if there be any, are present in only very slight traces. This investigation has finally decided the dispute concerning the nature of the gastric acid, which had attained such dimensions that no fewer than twelve authors have pleaded for lactic acid, fourteen for hydrochloric acid, and two for phosphoric acid.—*Lectures on Digestion—Ewald.*

TYPICAL FRACTURE OF A VERTEBRA BY MUSCULAR ACTION.—Dr. Schede (Hamburg) exhibited a preparation obtained from a man, who, in jumping head foremost into the water, threw his head backward with all his might to avoid striking the ground. Only three such cases of fracture of vertebra by muscular action are to be found in literature; in all the cause was the same, and in all the seat of the fracture was the fifth dorsal.—*Berl. Klin. Woch., June 6.*

SOLVENT TREATMENT OF CALCULI.—However valuable as an auxiliary to operative measures, the attempt to dissolve calculi by remedies administered by the mouth or injected into the bladder cannot by itself suffice for the cure of the large majority of cases of vesical calculus. As a general rule, patients do not come under treatment

until the stone has attained a considerable size, and this in itself is an obstacle apparently insuperable to the successful carrying out of the treatment by solvents. If, on the other hand, the patient is seen at an early period of the complaint, and the calculus is small and presumably consists of uric acid, the continuous administration for several weeks of a solution of citrate of potash might so diminish the size of the calculus as to enable it to pass through the urethra and thus render an operation unnecessary, while, if it failed in this respect, it would in no way prejudice the chances of recovery. As an aid to lithotripsy in uric acid calculus, the solvent treatment by alkalis is particularly applicable, provided always that the urine remains free from any trace of ammoniacal decomposition. In like manner, in cases of phosphatic calculus, the injection of water acidulated with nitric acid may occasionally prove a very useful adjunct to lithotripsy. —*Coulson's Diseases of Bladder, 1881.*

EXTIRPATION OF THE BLADDER AND PROSTATE.—*Dr. Gluck* (Berlin) said that in extirpating the bladder in dogs, the animals lived in all cases where the ureters were attached to the abdominal wall or urethra. Uniting the ureters to the rectum proved fatal from infiltration of urine and entrance of feces into the abdominal cavity. In view of his successful experiments, he recommended extirpation of the bladder in man in cases of severe and incurable disease.—*Berl. Klin. Woch., June 6.*

TREATMENT OF CATALEPSY.—The first indication relates to alimentation. Food must be introduced into the stomach until it is taken voluntarily. In order to arouse the mental faculties firing may be resorted to. It may be employed by an instrument made for that purpose, but a common hammer dipped in boiling water suffices. It should be applied for an instant at

different points over the spine and in other situations, and the operation may be repeated two or three times daily. Electricity may also be employed with advantage.—*Prof. Austin Flint, Med. News and Abstract, Sept.*

INFECTIOUSNESS OF MILIARY TUBERCULOSIS—*Klein* says that the evidence, whilst favoring the assumption that miliary tuberculosis is a specific infectious disease, is not yet conclusive. He sums it up under three heads: 1st. Communicability from man to man. It may be inherited; now, although heredity is not a distinguishing character of infectious diseases, yet it plays an important rôle in the propagation of a notoriously infectious disease, such as syphilis. It may be communicated from husband to wife or *vice versa*; this is denied by some, but numerous striking instances are recorded, and one well authenticated positive case outweighs all the negative ones. Dr. H. Weber's case in Clinical Society Transactions, 1874, is especially convincing. Instances are recorded in which it has apparently been communicated from patient to attendant and *vice versa*. The spread of the disease from one organ to another, in the same individual, belongs to this section. Virchow maintains that this is by infection, and the subject has been elucidated by Cohnheim. 2nd. Communicability from man to animals and from animal to animal. Cohnheim and Salamonsen have recently produced undoubted miliary tuberculosis of the iris, with subsequent general tuberculosis by introducing into the anterior eye chamber of rabbits and guinea-pigs a minute particle of human tubercular matter; this follows only the introduction of *real* tuberculous matter. These experiments have been confirmed by others. Tappeiner produced tuberculosis in dogs by causing them to inhale the spray of human phthisical matter; scrofulous caseous matter and

purulent bronchial sputa had no such effect. The blood of animals that have died from inoculation tuberculosis (Cohnheim's method) has been found capable of producing general tuberculosis when inoculated. Instances are also recorded of the transmission of tuberculosis by feeding, as by the milk and flesh of tuberculous animals; some cases have been recently recorded in which the disease was supposed to have been transmitted thus from cattle to man. 3rd. Nature of the materies morbi. The experiments above quoted prove that real tubercle is necessary for the production of tuberculosis. Klebs and Schüller find constantly present in tubercular matter minute micrococci; Klebs has artificially cultivated this organism (*monas tuberculosum*) and has produced tuberculosis by inoculating animals with it. Deutschmann confirms the presence of these micrococci in human tubercular pus.—*Practitioner, Aug., 1881.*

GENERAL ACCEPTANCE OF ANTISEPTIC METHODS.—In speaking of the open treatment of wounds, I have touched on the opposition which the new doctrine at first met with on so many sides. You all know well how violent this was. Even in science great changes cannot be brought about without injury to numerous individual interests; but I insist that nowadays no serious opposition exists; that there is no surgeon who would dare, at the operating-table, or in the treatment of the wounded, quite to renounce antiseptic methods; who calmly and with a good conscience would tread the paths which, fifteen years ago, we all followed like sheep. Even the most obstinate have had to give way to the great principles of the new era, and often in a much higher degree than they acknowledge to themselves or others—the necessity not only of the disinfection of hands, sponges, instruments and bandages,

but also the necessity of a primary disinfection of fresh wounds, is, I believe, universally acknowledged.—*Volkmann, Int. Med. Congress.*

TASTELESS CASTOR OIL.—Castor oil, as prepared free from the resin of the bean-hull, and without heat, is colorless, inodorous, almost devoid of taste, and does not gripe. When made into an emulsion with sarsaparilla syrup and soda-water, but three or four fluid drachms are required for a dose. This is a favorite laxative, both for taste and effect, in our large cities.—*Harris in Glisan's Midwifery.*

ANTISEPTIC AMPUTATIONS.—I now cure, every year, more cases of amputation of the thigh than during all the rest of my labors before the introduction of the antiseptic method. The number of amputations of the larger limbs which I have undertaken during the past few years amounts to more than four hundred. If I subtract those cases where death did certainly not result in consequence of the operation, but independently of this from some other serious complication, there results a mortality of four to five per cent.—*Volkmann, Int. Med. Congress.*

CHRONIC DISEASE OF KNEE-JOINT.—Prof. Kocher, of Berne, summarizes his experience thus: 1. Amputation of the thigh is indicated in cases where white swelling occurs in patients suffering from tuberculosis of the internal organs, or those whom the disease has rendered very anæmic, or who present a constant high temperature, or are reduced by prolonged suppuration. 2. Resection is the best treatment in all other cases, if contraction of the joint or considerable functional disturbance have occurred. 3. Under these circumstances resection gives in every way better results than are obtained from conservative treatment. 4. Resection should be

only resorted to in exceptional cases in childhood or advanced age. The results are as good or better as regards union of the ends of the bone in adult life than in childhood. 5. The mortality, since the author commenced the practice of resection, has only been 12 per cent.; and now, thanks to the recent improvements and the introduction of antiseptics, the operation has become free from danger. 6. His present endeavor is so to improve the method, that movable, and at the same time firm, joints may be secured. The author has resected the knee-joint fifty times.—*Int. Med. Congress, Brit. Med. Journ., Oct. 1.*

INOCULATING FOR HYDROPHOBIA.—M. Galtier, a veterinary surgeon of Paris, who for years past has made a special study of rabies, tried the effect of introducing the virus of hydrophobia into the torrent of the blood by injecting it into the veins of a number of sheep and goats. Animals which received the virus directly into the circulation not only did not suffer the least inconvenience from it, but when subsequently exposed to repeated inoculations of hydrophobic virus, it produced on them no effect; while unprotected animals subjected to the same tests invariably succumbed to the disease. When hydrophobia is communicated in the ordinary way, it is generally a long time in taking hold upon the system, and M. Galtier is at present endeavoring to ascertain whether he cannot anticipate and neutralize the natural development of the disease as we can the slower development of small-pox infection by the more rapid action of vaccine lymph.—*Cameron, on Micro-Organisms and Diseases, Brit. Med. Journ., Oct. 8.*

ELECTRIC BATH.—The patient is immersed in water, which should be either slightly acidulated or saline to

increase its conducting power. The poles are simply connected with the water. So great is the resistance offered by the water to the passage of electricity, that but little if any effect is produced by even powerful currents. Charlatans, who apply this method, impose on their ignorant clients by connecting the electrodes with some part of the patient's person, but when this is done it is no longer an electric bath. Under any circumstances, applied as completely as can be, the electric bath is a very inferior application, and violates the canon, which requires applications to be made to the affected part. The same remark is true of general electrization. It is undeniable that patients have improved under a course of general electrization, but how much of the benefit is due to mental influence does not appear. We know that extraordinary results have been achieved by agencies, which simply impressed the imagination. — *Bartholow's Medical Electricity.*

ABSCESS OF THE BRAIN, FATAL WITHOUT COMA.—Dr. Jas. Hudson of New Zealand, reports such a case in a young strumous girl, aged 17. The symptoms were severe headache, obstinate vomiting and pyrexia, paralysis of the right arm, and some difficulty of articulation and gradual prostration. There was no delirium and consciousness continued to the last, death occurring quietly after swallowing some liquid some of which probably got into the windpipe. On *post-mortem* the dura mater over the left hemisphere was found firmly bound down with adhesions and at the posterior part of the left frontal lobe was a cavity containing pus the size of a walnut, immediately under the dura mater but extending some distance into the cerebral substance. — *British Medical Journal, July 25th.*

EXTRACTION OF CALCULI IN EGYPT THREE HUNDRED YEARS AGO.—Prosper Alpinus (*De Medicina Aegyptiorum, Venice, 1591*) describes the mode of dilating the male urethra for the removal of calculi from the bladder, in vogue in Egypt 300 years ago. He says that a certain Arab named Haly had acquired great celebrity for extracting stones without incision. For this purpose he employed a wooden canula, eight inches long, and of the width of the thumb, which he applied to the urethra, and then blew into it with force, at the same time pressing on the perinæum with the other hand to prevent the air from entering the bladder. Then, the end of the canula being closed, an assistant introduced a finger into the anus, and pressed the stone by degrees towards the urethra and into its vesical extremity, and when he felt it approaching the prepuce, removed the canula suddenly from the meatus, whereupon with great dexterity the stone was extracted. In one instance he saw eight small stones thus removed from a boy, and in another one the size of a large olive from an adult.

TWO CASES OF EXTIRPATION OF FLOATING KIDNEYS.—*Dr. Langenbuch* (Berlin) extirpated floating kidneys on the right side: in a woman belonging to the working class on account of severe pain and consequent mental impairment; in an apothecary, on account of incontinence of pylorus, from pressure of the misplaced organ on the duodenum. The incision was made along the outer border of the rectus muscle and the outer layer of the mesocolon was divided (the inner not, for fear of injuring branches of the mesenteric artery). The secretion of urine was somewhat lessened in both for a few days after the operation, but became normal. A slight albuminuria disappeared and both patients were relieved of their sufferings.—*Berl. Klin. Woch. May 19th.*

DEATH FROM SWALLOWING CLASP-KNIVES.—In the *Medico-Chir. Transactions*, volume 12, is an account of a sailor, who upon three occasions, in a spirit of bravado, whilst intoxicated, swallowed a large number of clasp-knives. On the first occasion, he recovered promptly, passing the knives within two days. Six years afterwards he swallowed fourteen; he now had vomiting and pain but passed all of them within a short time. Nine months after, he swallowed 13 more. He never recovered from this attempt, but lingered in a state of great suffering and wretchedness for four years, when he died. Upon examination *post-mortem*, between 30 and 40 fragments of blades, knife-springs, and handles, more or less corroded, were found in the stomach, and two lying across the intestines, from which they partly projected into the abdominal cavity.

ACTION OF BROMIDES IN EPILEPSY.—Summary:

I. In 12.1 per cent. of epileptics, the attacks were completely arrested during the whole period of treatment by the bromides.

II. In 83.3 per cent. the attacks were greatly diminished both in number and severity.

III. In 2.3 per cent. the treatment had no apparent effect.

IV. In 2.3 per cent. the number of attacks was augmented during the treatment.

V. The form of the disease, whether inherited or not, whether complicated or not, recent or chronic, in young or old, healthy or diseased, appeared, in no way, to influence treatment.

VI. In 66.6 per cent. there was no trace of bromide poisoning; in 33.4 per cent. it was observed in varying forms and degrees but in no case to any serious extent, namely, physical weakness in 28.5 per cent., mental weakness in 18.8 per cent., and so-called bromide eruption in 16.6 per

cent.—*Dr. A. Hughes Bennett in Ed. Med. Journ., March.*

GRADUATION WITHOUT EDUCATION.—Can a man graduate without seeing a case? In New York, apparently, he can. Dr. R. F. Weir, in a letter to the *N. Y. Med Record*, says, that he can say from personal knowledge, that "a student may graduate without ever having dissected any part of the human body, without ever witnessing or attending a midwifery case, or without ever being present at a hospital clinic." It is also possible for a student to "graduate in less than a year from the beginning of his actual study."

This will perhaps explain why American diplomas are not accepted without question as licenses to practise in Great Britain, a fact which excites the indignant remonstrances of some American writers.—*Brit. Med. Jour., July 30.*

WALDENBURG'S PNEUMATIC TREATMENT OF DISEASES OF THE RESPIRATORY AND CIRCULATORY ORGANS.—The *British Medical Journal* notices very complimentarily this remarkable work, the second edition of which appeared in Berlin last year. The object of it was to give to the diagnosis and treatment of such diseases a strictly physical, viz: a mechanical basis, similar to that possessed by ophthalmology in the form of the laws of optics. The author describes a method of physical examination, *pneumatometry*, i. e., the measurement of the forces of the inspiration and expiration, which will often be found most valuable when other methods show themselves deficient. *Spirometry*, another method, the author admits has not fulfilled the expectations which were formed of it.

The chapter on pneumatic treatment of diseases of respiration and circulation, with a description of the author's pneumatic apparatus, occu-

pies the greater part of the work. "The results are so striking in many instances and at the same time so incontrovertible, because controlled by pneumatometric and spirometric measurements at the commencement and end of the treatment respectively, that it is hard to explain that a new method which can boast of such successes in the hands not only of its originator, but also of many others, should have remained so unknown in this country as it actually is."

THE MECHANICAL SURGEON.—Such have been the bane of the science, intruding themselves into the ranks of the profession with no other qualifications but boldness in undertaking, ignorance of their responsibility, and indifference to the lives of their patients; proceeding according to the special dictate of some author as mechanical as themselves, they cut and tear with fearless indifference, utterly incapable of exercising any judgment of their own in cases of emergency, and sometimes without possessing the slightest knowledge of the anatomy of the parts concerned. The preposterous and injurious attempts of such pretenders can seldom fail to prove destructive to the patients and disgraceful to the science.—*Ephraim McDowell.*

FAURE'S STORAGE BATTERY.—This is a recent invention by which electricity in almost any amount generated in an active battery can be stored up for transportation and future use. It is described as consisting of a cylindrical vessel of lead, nine inches high and five inches in diameter, with a leaden bottom, but open at the top; into this is packed a kind of cushion of a material which has the power of absorbing electricity. To this vessel are attached the two poles of a working battery, and as long as the connection is maintained, the vessel accumulates the electricity flowing into

it. When charged, it can be detached from its connection and kept for a long time, or carried from place to place, like the jars of compressed carbonic oxide, used for anæsthetic purposes. When required to be used, the cushion which should always be kept moist, is wetted with dilute sulphuric acid, and wires connecting are attached to its poles when it is converted into a powerful battery. Prof. George Buchanan, of Glasgow, used one of these instruments which are jars "no bigger than ordinary preserved meat tins." (received a few days before from Paris), on June 3rd, removing a nævoid growth of the tongue without the loss of a drop of blood.

WOMAN AS A PHYSICIAN.—Mary Putnam Jacobi says:

"The claim to equal confidence as made by a woman must be a peculiarly intellectual one, because it must be sustained in spite of a conspicuous inferiority of physical strength. To produce upon the mind of the average public the same impression as may be made by a masculine physician, the woman must exhibit comparatively more force of mind and character, because the force of body is so much less, and in a question of forces the impression unconsciously received from physical size must be taken largely into account. It is like a watch as compared with a locomotive; if there be not greater precision of action in the one, to balance the imposing messiveness in the other, the more delicate instrument must be crushed with contempt."

THE experimental infection of the iris with a tuberculous substance is always followed by a general infection of the body; the possibility of inoculation, therefore, can be used as a diagnostic sign of tuberculous products.—*Cohnheim, Cent. f. d. Med. Wiss.*

TORN PERINÆUM.—The patient was in labor of her second child; the first had been a forceps delivery and she had been badly torn. I found a fibrous band occupying the place of the perinæum, which resisted two hours of severe labor with the head pressing on it. I applied the forceps and simply kept the head as far as the pain had brought it, until the next pain, when it instantly snapped, and the rent went through the sphincter, yet she eventually completely recovered, the means used being the following: She was kept upon her sides, the knees together, the parts being kept clean. She was made to empty the bladder on her elbows and knees; the bowels were kept locked with opium, being only occasionally relieved with enemata. I have twice since attended her.—*Abst. of 2500 Cases in Midwifery: D. M. Williams, M. R. C. S., British Med. Jour. July 2.*

SIGISMUND reports a case in which a small splinter of wood remained in the eye for forty-seven years without any disturbance.—*Berl. Klin. Woch.*

SOCIETY BULLETIN.—*Academy of Medicine* will meet Tuesday, November 15th, at 8½ P. M. *Clinical Society* will meet Friday, November 18th, at 8 P. M. Dr. C. Johnston will read "Notes on the International Medical Congress." Dr. Bermann will exhibit microscopic specimens of the *Bacillus Lepræ*. *Medical Association* will meet Monday, November 14th, at 8 P. M. Dr. Williams will open the discussion of "Mammary Cancer." *Medical and Surgical Society* meets every Wednesday at 8½ P. M. *Section on Obstetrics and Gynecology, Medical and Surgical Faculty of Maryland*, will meet Friday, November 25th, at 8¼ P. M. *Medical Society of Harford County* will meet at Havre-de Grace Tuesday, November 15th, at 11 A. M. Dr. R. D. Lee will read an essay on "Inflammatory Diseases."

MEDICAL ITEMS.

Dr. A. H. McClintock, the eminent obstetrician, died in Dublin, Oct. 21st, æt. 60.—Total excision of a gravid cancerous uterus was accomplished successfully by Spencer Wells, Oct. 21st.—Thirteen nationalities were represented at the Int. Med. Congress. 119 meetings of the various sections were held, in which 464 papers were read.—Dr. F. W. Pearson has been elected Professor of Diseases of the Chest, Throat and Ear in the Baltimore Med. College.—Hammond does not find arsenic prevent the eruptions caused by the bromides.—In affections of the scalp, in which benzoated zinc ointment does not answer, Erasmus Wilson recommends one part of red oxide of mercury ointment diluted with three parts of unguentum petrolei.—Germany leads at present in scientific medicine both in quantity and quality, and the rising generation of physicians are learning German physiology.—*Billings*.—Prof. Theophilus Parvin, of Indianapolis, has been elected to the Chair of Obstetrics and Gynecology in the University of Louisville.—The *News and Abstract*, the companion journal of the *Am. Journ. Med. Sciences*, is to be made a weekly.—The subject of international nomenclatures was prominently brought forward at the recent Congress.—Williams records the case of a lady who, in consequence of the habitual use of opium, had very frequently only one stool in six weeks, and once during a whole year had her bowels opened only four times.—Dr. John E. Hill of Tennessee, has been appointed a resident physician at the City Hospital.—We talk no longer of worm fever, remittent fever, gastric fever, and so on in children; for under these various names we recognize the one disease, typhoid fever, varying in severity, but marked always by its own characteristic symptoms.—*West, Int. Med. Cong.*—The Connecticut Med.

Society has 430 members—30 being recent additions.—In 398 major operations, Esmarch reports a mortality of 6, or $1\frac{1}{2}$ per cent.—American Public Health Association.—The ninth annual session of this association will be held at Savannah, Georgia, Nov. 29th to Dec. 2nd, 1881. Dr. Azel Ames, Jr. is secretary, No. 12 Pemberton Square, Boston.—It is said that aloin injected hypodermically in the dose of 1-25 grain will purge.—A bald line extending across the eyebrow is said to be almost pathognomonic of syphilis.—Robin claims to be able to diagnose typhoid fever by the presence of indican in the urine.

ADVERTISING NOTICES.—*Be sure to read the advertisements contained in this Journal. They contain notices of new preparations, new instruments, hospitals, colleges and other items of interest to the profession.*

Messrs. Shepard & Dudley, the well-known surgical instrument makers of New York city, can furnish the readers of the JOURNAL with the very best surgical instruments, or any of the appliances used in surgery, at reasonable prices. A complete catalogue with 3,000 illustrations will be sent on receipt of 60 cents. Before buying instruments elsewhere it would be wise to examine the stock of this firm.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

THE RAPID SPREAD OF THE MORPHIA HABIT (BY SUBCUTANEOUS INJECTION) IN GERMANY. A VILLAGE OF MORPHIA TAKERS.

BY H. H. KANE, M. D., DE QUINCEY HOME,
NEW YORK CITY.

The following well authenticated facts are taken from a paper* by Dr. Aug. Loose of Bremen, a reprint of which he kindly sent me some time ago. It opens with the following curious story:—

"A young man, 18 years of age, employed in a retail business, of a somewhat stupid physiognomy, of a pale, pasty appearance, and, for one of his age, a strikingly large development of the *panniculus adiposus*, comes to a physician, asking that he be relieved of the morphia habit. He was a native of a small town, the two physicians of which, were known to use morphia habitually on themselves and prescribed the same for their patients

at every opportunity. About four years before, the young man received in the course of a slight illness several injections of morphia and continued its use himself. His daily dose is now one-half, sometimes one gram. His brother is also an habituè and he says that in his native town a large number of persons are regularly using morphine in large doses. They were led to it by the example and practice of the two physicians aforesaid.

This young man was told of the danger of the habit and advised to go at once into a hospital for treatment. Nothing has since been heard of him.

A well-known physician living near this town was requested to give some information about the matter. His reply was that one of the physicians of the place had lately died, and that to the other with whom he was well acquainted and knew to be a man of honor, he had written asking for a statement of the facts. The reply acknowledged the truth of the charge that both physicians were morphia takers; that the one who had died had been in the habit of taking enormous quantities subcutaneously, on

* Niedersachsichen ärztvereinsbund. Dritte Hauptversammlung, Bremen, June 1878.

account of great mental trouble and distinct physical disease. At the autopsy old pericarditis with adhesions had been found. Towards the close of his life, he was not only obliged to largely increase the dose of morphia, but also to take chloral in order to be able to sleep.

The surviving physician writes that he knows of but one case that resulted in the morphia habit through the carelessness of the deceased. Also, that he, himself, did for a time use morphia subcutaneously, but never more than a centigramme and never oftener than three times a day, and that he now no longer uses it. He acknowledges that two patients were led to its habitual use through his placing the syringe in their hands; one a woman with joint trouble, the other a man with asthma who soon came to use enormous quantities of the drug. Of the latter he says:—"The second case was that of a gunsmith of this place, suffering with asthma of great severity, the attacks of which after insupportable sufferings of many years standing, I promptly checked with morphia and then allowed him a syringe. He was really so delighted with this remedy, that he continued its use and recommended it to all sufferers. *He also established for himself a business in the sale of these syringes.* It is said that others were led by him to use morphia in this way. There was, for instance, a merchant residing opposite to the gunsmith, suffering much from chronic coxitis, and a newly formed abscess. He procured through the gunsmith a hypodermic syringe, made the injections himself and finally became a morphia taker, using fabulous quantities. It is said that he wished his whole family to use the instrument." These things were done without the knowledge of either of his physicians.

Dr. Loose seriously questions whether the physician making this report is fully aware of the spread of

the practice in his locality,* for within a few days he has learned of two other cases in the same town; a brother and sister. The brother is now using 50 grammes (about 775 grains) every 12 days or 55 grammes each day. The sister uses a smaller quantity.

Moreover, a farm-owner and his wife, living near the town in question were both addicted to the habit, the wife having been recently cured in a private asylum.

The medical society of Hanover, furnish 10 cases, all treated at the Hanover Hospital of that place. All these cases were those of neuralgic patients who contracted the habit, through being allowed by their physicians to use the syringe themselves. The duration of the habit varies from six months to six years; the injections being made regularly during this time by barbers, chambermaids or by themselves.

The plan of treatment pursued in three cases was by gradual deprivation; in seven, sudden deprivation.

Wine, protracted baths, and chloral were employed. In two cases after the withdrawal of the morphia there were attempts at suicide, with one some transitory insanity, and in another a year later, a state of depression with hallucinations, making a transfer to a lunatic asylum necessary.

Dr. Loose reports, further, 20 strictly observed cases of this habit, reported to him by 11 physicians, the particulars of several of which cases he relates. "A woman, æt 60, said to have been formerly addicted to the use of drunkenness. She was fresh, active, well nourished and possessing quite a vein of humor. For relief to pain during a slight illness, morphia was administered hypodermically and she drifted into the habit. The daily dose

*It must be remembered also that a morphia taker's word can seldom be relied upon, either as regards himself or others. (Levenstein—Morbid Craving for Morphia. Kane—Drugs That Enslave).

is not known, beyond the fact that she took three or four syringefuls of a concentrated solution of morphia. During the last 18 months of her life she fell into a condition of serious marasmus, not explainable on the ground of her age and bodily suffering. She became, contrary to her previous disposition, peevish, inclined to cry, very melancholy, lost her appetite and sleep and became greatly emaciated. She was chiefly in a state of stupid apathy or lost in a semidemented tendency to crying. Occasionally she would brighten up after an unusually large dose of morphia. She developed bronchial catarrh and died of an intercurrent attack of pneumonia.

A woman, enceinte, tried to relieve the troubles of gestation by means of tri-daily injections of morphia. Neither her family nor her physician knew anything of her vice. At the commencement of labor she gave herself a strong injection. The birth was easy. The child was cyanotic, whined, breathed imperfectly, was cold, but slept and did not vomit. It died in the course of five hours after birth, and the autopsy showed nothing to account for death. After the delivery, the mother sank into a state of great weakness, the pulse falling to 38. Involution took place slowly and with evidence of inflammatory action. She was broken of the habit by gradual diminution of the dose until nothing but clear water was used. She is now well and enjoying good health. The collapse after delivery was in consequence of the sudden deprivation of the morphia and her strong desire for it, forced her to a confession of her former practice."

Death, weakness or mental stunting in the child are not uncommon results of continued morphia taking by the mother during the period of gestation. I know of one case myself where the child, though well-developed physically, was almost idi-

otic, and several cases are related by Dr. Alonzo Calkins,* one of which I have quoted in my last work upon morphine† and give here: "At an inquest held by Dr. Macnish, it appeared that a child, five years of age, though to appearances only so many weeks old, had never been able to walk, nor so much as to utter an articulate sound. The mother during her gestation (as was in evidence) had taken to morphia, using a drachm a day in the months just preceding her demise. A child born before the habit had become fixed, showed a normal development and the aspect of general health."

The fact is well established that the use of the drug by non-pregnant women causes in nine cases out of ten amenorrhœa and sterility; in men loss of sexual power and sexual appetite. Levenstein noticed that the wives of many of his male morphia takers, though fruitful previous to their husbands' addiction to the habit, soon after ceased to bear children. I have been able to verify all these points in a large number of cases; and, further, to demonstrate the fact that in males, not only is there loss of sexual appetite and power to fecundate, but the fact that the seminal fluid contains comparatively but few spermatozoa, and these very imperfect.

Here is another case recorded by Dr. Loose illustrating the danger of entrusting a syringe to the patient, and the necessity for gradually increasing the dose: "A master-mechanic, nine years ago was given morphia subcutaneously a number of times to relieve the pain of renal colic. While in Carlsbad he had an attack and injections of morphia were given during the night. The physician of that place being very busy, advised the man to procure a syringe and ad-

* Opium and the Opium Habit. Phila., 1871, p. 117.

† Drugs that Enslave. The Opium, Morphia and Chloral Habits. Phila., 1881.

minister the drug himself. He did so. At first he used it in moderation, but gradually increased the dose, not only to relieve the pain, but to put himself in a pleasant state of mind when the cares and troubles of the day annoyed him. In the morning he finds himself very weary, and it takes him some hours to right himself, which he does by making three or four injections when he feels quite strong and fit for work. For the balance of the day he finds it easy to abstain from the morphia, but as night approaches he becomes anxious and uneasy. Formerly, after a few injections, he would become calmer, but now, on the contrary, he becomes more excited, and he is obliged to give himself ten injections one after another. The daily quantity varies from eight to twenty-two grains of the muriate of morphia. His appetite is generally poor. At noon he now gives himself during the dinner-time one or more injections and continues his meal with an increased appetite. His memory has become very feeble; he forgets the names of persons well known to him. His sexual organs are totally prostrated."

Twenty-two grains hypodermically may be considered a large daily quantity, but larger have been given. Prof. Samuel Logan, of New Orleans, reported to me a case where fifty grains were used daily, and the patient broken of the habit (it could be hardly called such in this case) by gradual reduction, extending over a long time.† The largest amount used hypodermically in twenty-four hours, of which I know, is related by Dr. W. F. McAllister,|| Quarantine Office, San Francisco, California. He says:

"A physician, resident in this city, contracted dysentery in Shanghai, China, in the summer of 1873. Mor-

phia was used hypodermically and he drifted into the habit of using the drug in this way himself, the habit resulting in his death in 1878. I was called to see him professionally in 1875. He was at that time residing in Hong Kong, China. He was consuming each day *seventy-two grains* of the sulphate of morphia, in three doses, twenty-four grains to the dose. This he continued to do until the day of his death." This would equal 216 grains of morphine, or 1,296 grains of opium, by the mouth.

One or two of the cases related by Dr. Loose are of that peculiar type where the continued use of morphia in small doses exercises no appreciable ill effect on the body. Similar cases are related by Golding Bird and Parrish. In the case of a woman, related by Loose, while no manifest ill effect, physically, was apparent, she was decidedly affected morally and mentally. Whereas she had been formerly honest and straightforward in her business (she owned a manufacturing concern) she became careless, reckless, dishonest; formerly neat in her attire, she became slovenly; once a very religious woman and a lover of truth, she became a liar and morally bankrupt. Her business was finally ruined.

Dr. Loose, who seems to have studied this subject very carefully, announces it as a fact that the continued use of morphine hypodermically is largely upon the increase in the country towns as well as in the cities, and deems it of sufficient importance to justify honest inquiry on the part of the physician and prompt and thorough action on the part of the Government. There, as here, there are laws forbidding the sale of morphine to anyone without the written order of a physician. There, as here, the law is daily broken by some of the best and all of the catch-penny druggists. Morphia takers forge physicians' names to prescriptions calling

†Kane. Morphia Hypodermically. N. Y., 1880. P. 275.

|| Ibid.

for the drug, or are supplied by friends in the wholesale drug trade. Some very able and honest physicians in this country scout the idea of the habit's being formed by the use of the drug subcutaneously; others claim that the habit (by hypodermic injection) is not upon the increase. I can only say that the facts in the case prove them either ignorant or wilfully blind.

The most salient point of nine out ten cases of the habit, when formed in this way, is that the patient became an habitué *because* he was either advised or allowed by his physician to obtain and use a syringe and the drug. As well put a child in a powder magazine with matches for toys. In the event of an explosion, which is almost certain to occur, who would be the most to blame?

In conclusion it may be said that the habit by hypodermic injection is more rapidly injurious, attended by more peculiar symptoms, more difficult to break, occasions more suffering during the treatment, and is more fruitful in accident than when the drug is taken by the mouth.

191 W. 10th Street.

AN INTERESTING CASE OF HERNIA TREATED CON- SERVATIVELY; RECOVERY.

BY J. EDWIN MICHAEL, A. M., M. D.,
Professor of Anatomy and Clinical Surgery,
University of Maryland.

(Read before the Clinical Society of Maryland,
Nov. 18th, 1881).

The following case of hernia, which has recently come under my care, seems to me to present a sufficient number of interesting points to justify me in bringing it to the notice of the society. Moreover, its management gave me an unusual amount of mental anxiety, and I would like to ask the verdict of the society as to whether the successful issue is due to a fortunate accident or to the course of

treatment pursued, for I am prepared to confess at the outset that there were several occasions during its progress when I was not quite firm in my own conviction as to what was best to be done.

Mr. R., a tall, rather spare man, sixty-four years of age, has been afflicted with a reducible inguinal hernia of the left side for a number of years, and the only inconvenience he has suffered from it was that it compelled him to wear a truss. On Monday, September 12th, he was seized with a pain in the right groin and noticed an increase in the size of a lump, which had been noticeable in that region for several days. I was called to see him on Tuesday evening, and, upon examination, found a tumor about the size of an egg over the situation of the right internal inguinal ring. The tumor was doughy to the touch, not resonant on percussion, and upon manipulation gave no sign of gurgling. The patient had had an evacuation from the bowels on the day before I saw him, and previous to the occurrence of the pain above referred to, but not since. There was considerable tympanitic distension of the abdomen and no gas passed by the rectum. There was no belching, nausea or vomiting. The patient complained of severe pain at the seat of the swelling and also of pains over the abdomen and in the small of the back.

At first I concluded that I had to do with a case of femoral hernia, in great part omental, which had curled up over the abdomen above Poupart's ligament, but a more careful investigation convinced me that I had before me an incomplete inguinal hernia. A moderate amount of manipulation failed to reduce and I ordered ice to be applied locally, gave one-sixth gr. of sulphate of morphia hypodermically and left the patient, promising to return in two hours. On my return I found the patient in a very

comfortable state, though the tumor remained and the tympanites was unchanged. Another attempt at taxis met the same fate as the first. The question of operation now presented itself to my mind. I had before me a case of hernia which I had been unable to reduce by taxis, and it was associated with local pain, pains in the abdomen and back, tympanites and constipation. On the other hand, I had before me a debilitated man of sixty-four, who had had a passage on the day before, who had been made comfortable by a dose of morphia, and who was not suffering from nausea or vomiting.

I did not feel justified in operating under the circumstances, though I did not feel quite comfortable in leaving my patient in his then condition, but I chose what I considered the lesser evil and abstained. The hips were elevated, the thighs flexed, the legs being supported on pillows and one-eighth gr. morphia every two hours prescribed. Ice was also ordered to be applied locally.

The next day was passed in about the same condition. The pulse remained good; no nausea supervened and no passage from the bowels having occurred I ordered in the evening a full dose of castor oil. During the night the oil acted freely, indeed copiously, and the weakening effect of the discharges upon my patient was so apparent that I ordered a mixture of paregoric, tr. krameria and chalk mixture, in order to check them. A liberal fluid diet and plenty of whiskey and quinine were ordered also. On the 18th, the sixth day of illness, Mr. R. was in a pretty fair condition. The diarrhoea produced by the castor oil was relieved, though the evacuations were still soft, and he was somewhat debilitated from the ordeal through which he had passed. On the night of the 19th I was called in great haste by a message which announced that the patient was vomiting freely and

suffering great pain. I had given positive instructions that I should be promptly called should vomiting supervene, and upon receipt of the message hurried off with assistant and instruments prepared to operate. When I arrived at the house, however, I was informed that the trouble was over and the alarming symptoms had passed away as suddenly as they had appeared. The patient had been suddenly seized with acute pain at the seat of the tumor, and a few moments afterwards had begun to vomit copiously. Shortly before my arrival both the pain and the vomiting abruptly ceased. The matters vomited had been preserved for my inspection and were as clearly fecal in appearance and odor as any matters passed from the rectum could be. The condition of the patient was good; there was no sign of collapse, and I concluded there had been strangulation of the bowel, which, probably from the movements of vomiting, had been relieved spontaneously. In a day or two the tumor began to increase in size and became sensitive, and shortly afterwards gave a resonant sound on percussion. I supposed a portion of gut was being forced down into the sac, but as the passages of fecal matters and gas from the rectum continued regularly I did not interfere except so far as to apply a compress over the mass. Redness of the surface, however, supervening, and sensitiveness to pressure increasing, I began to suspect that an abscess was forming and that the resonance was due to the presence of gases of decomposition arising from sloughing and disintegration of the incarcerated omentum, and on the 28th I announced my conviction to the patient's wife. I preferred not to institute any operative procedure on account of the possibility of encountering a piece of intestine as well as from the conviction that in a day or two at most nature would settle the matter for us.

On the next day the abscess broke and gave vent to a large amount of the most offensive matter and gas I have ever had the misfortune to encounter. I examined carefully and found no trace of the presence of feces. The abscess cavity was thoroughly washed out with a mild solution of carbolic acid and dressed with a large pad of oakum kept in place by a spica bandage. Careful syringing and a fresh oakum pad was the treatment pursued twice daily from the opening of the abscess, my object being to keep the parts as clean as possible.

All went well until the third day from this time, when I discovered feces in the discharge from the abscess cavity and noted the escape of gas which I took to be intestinal. The treatment was continued, however, as before, and although careful search was daily made, there was from this time no further appearance of gas or feces in the discharges. I suppose there must have been a small opening produced by ulceration into the portion of intestine drawn down to and perhaps into the hernial ring by the imprisoned omentum, which opening afterwards healed up.

On October 12th, Mr. R. had a good passage, or as his wife expressed it, "a grand passage," in the natural way, and that without causing either gas or feces to show themselves in the abscess. Since then the abscess has been gradually healing up and requiring less and less attention. The patient gains strength slowly on account of his age and previous debility. His bowels have acted with sufficient regularity. My last note is to the effect that he "has gradually improved since last note, spends the day out of bed, goes up and down stairs at will. Not much abscess cavity left. Openings puckered and nearly closed." My view of the present state of the patient is that the parts in the immediate neighborhood of the internal ring are thoroughly sealed up by the inflam-

matory deposits which the abscess gave rise to, and that the hernia is radically cured. There must also be a part of the intestine, probably the transverse colon adherent at this point, and as this has given rise to no trouble since the opening of the abscess, now a month ago, there is no reason to expect that it will hereafter prove dangerous. I am strengthened in my conviction that the cure is radical from my observation of another case which came under my notice at the University Hospital about seven years ago. In that case the abscess, like the one in the present case, except that it occurred in the *tunica vaginalis*, was opened, the operation being performed as if for strangulated hernia. When the nature of the trouble was made apparent, a counter opening was made at the bottom of the tunica vaginalis and a drainage tube inserted. The cavity healed and the patient died about six weeks later from another affection. Dissection showed a complete healing up of the inguinal canal.

Strangulated hernia is a condition which puts the surgeon to the test: The operation for its relief is a most serious one. Rashness and vacillation may be alike fatal. The management of such cases requires boldness as well as caution, promptness as well as deliberation. When operation is indicated by positive symptoms, there should be no delay in its performance. But what are the positive indications? I am aware that gangrene of the gut has occurred without the occurrence of nausea or vomiting. I am aware also that we may have passages from the bowels where there is positive strangulation. There may be described, and, in fact, we often see such a definite account of the physical conditions in the symptoms presented, that we have no choice of action. There is strangulation of the gut and if taxis will not serve operation must. But in a case like the one I have just

related I confess that I am not able to draw the line upon which I would act in all cases. I would be guided, as I was in this case, by concomitant circumstances. It is true that I treated my patient conservatively and was rewarded by seeing him restored to his family. But I might have operated and achieved the same result more quickly. Or, if I had operated, he might have died; or another patient in the same condition treated as I treated Mr. R. might not recover. The circumstances were very trying. I acted in the light of my best judgment and I take great pleasure in placing my case and my conduct before the able surgeons of the Clinical Society.

CLINICAL EXPERIENCE IN THE USE OF THE SOLUTION OF OXY-SULPHURET OF CALCIUM.

BY C. HEITZMANN, M. D., OF NEW YORK.

(Read at the meeting of the American Dermatological Association, at Newport Sept. 1, 1881).

The solution of oxy-sulphuret of calcium is a preparation long known in Dermatology. It first became extensively used after the recommendation of Dr. Vleminckx of Belgium, and in honor of this physician, who found the solution to be the most efficacious remedy in scabies, it bears the name of the solution of Vleminckx. Besides in Vienna it had been largely used by Hebra for removing the patches of psoriasis.

In bringing the results of my own trials in different skin diseases before the profession, it is perhaps not superfluous to remark that a specific remedy does not exist; neither is there anything like an invariably sure and safe action of a remedy. We know too well, that even powerful remedies often fail in their action or produce an effect contrary to that we had expected upon the ground of a large experience. It is a depressing fact indeed that in the treatment of diseases of the skin, where everything is open to direct

and accurate observation, the remedies do not work uniformly, and it not very infrequently happens to the dermatologist that where he expected an improvement from the application of a certain remedy, just the reverse takes place, and a decided deterioration of the condition of the skin is the result of his therapeutical measures. Every physician, who treats the very best class of patients, the most educated and refined people, knows what the impression made upon the patient is under these circumstances. The sorrowful looks of the sufferer are scarcely worse than our own conviction of our therapeutical impotence.

I wish to emphasize, therefore, that a recommendation of a certain remedy can hold good for an average of cases only, and every one who repeats the trials must be prepared for failures. The dermatologist, especially, who observes such failures and becomes convinced that even external medication is by no means an invariably safe and successful procedure, cannot have much faith in internal medication, which is nearly completely beyond control. None of us will shrink from administering remedies inwardly, whenever he deems it useful to the patient, but success in many instances is uncertain with such treatment, much more so than with local medication. The claim of some dermatologists that they can control skin diseases by internal remedies, and exert a therapeutical action upon the stomach, the liver, the kidneys, etc., of the patient, the derangements of which are imagined to be the cause of skin diseases, in my conviction lacks a solid foundation. A number of reliable physicians have demonstrated how futile such claims are, and they have done so, not on the ground of mere theoretical speculation, but on the ground of direct trials and unprejudiced observation.

Those dermatologists who admin-

ister a great variety of drugs internally, no doubt, honestly believe that they do good to their patients, and very likely the patient believes it himself. But the Indian medicine-man also believes that his herbs and decoctions do good, simply because the patient gets well under their use. A strict and scientific proof of such remedial actions, however, is wanting with both the Indian and the white medicine-man, as neither of them knows what he does, or whether his remedy does not do more harm than good.

The solution of oxy-sulphuret of calcium is prepared in the following way: Take 1 part of calx viva, 2 parts of precipitated sulphur, 20 parts of water; boil in a china or glass vessel to the remnant of 12 parts, and filter. The dark red-brown liquid has a very disagreeable smell, and is a strong caustic. The smell, perhaps the only objection applicable to the remedy, may be overcome to some extent by the addition of fragrant oils, especially that of anise. The solution may be diluted with water according to necessity; also with alcohol, which does not materially alter the properties of the solution, although a part of the sulphur-lime is precipitated by it.

The solution of Vleminckx I have applied in the following skin diseases:

1. *Psoriasis*, 30 cases. As a matter of course, psoriasis of the scalp and acute psoriasis were excluded; the former as the solution destroys the structure of the hairs, to some extent at least; the latter, as any local irritation must be avoided in cases where the eruption of psoriasis takes place in an acute way. According to the age of the patient and the tenderness of the skin, the solution was applied pure or diluted. It was rubbed into the patches with a coarse flannel rag or a tooth-brush at night, until slight stinging had resulted. Caution must be taken not to rub too hard, especially if the pure solution be applied,

as eczema may be produced, treatment of which takes more time than the removal of the psoriasis patches. After the application of the solution, in mild cases the tar ointment, in severe cases the tar tincture, is rubbed into the patches, the patient wearing an old flannel dress during the time of the treatment. Baths after the application of the solution can be entirely dispensed with. In five to six weeks even very severe cases of psoriasis, where the whole body was covered with large patches, got well. No remedy was given inwardly, but meat diet was reduced or entirely cut off; also spirituous drinks of every description. Unfortunately we have no means yet to radically cure psoriasis. The very first thing that we must tell to the patient is this.

More recent remedies, especially the chrysophanic and pyrogallic acids, I have also tried in a number of cases; but like any other remedy, by long continued use they lose their efficacy; pyrogallic acid, moreover, is by no means entirely harmless. It is certainly of importance to have at our disposal a number of powerful remedies in order to allow a change in the treatment, whenever required, and from this point of view the treatment with solution of Vleminckx and tar, though old-fashioned, remains recommendable.

2. *Acne Disseminata*, 95 cases, out of which 75 were cured. In 12 cases the result was unknown, as the patients did not return; in 5 cases the solution proved to be useless, and in 3 cases the disease was aggravated by its use. The solution may be given pure or diluted with alcohol, and in the former case the patient at first dilutes it with 5 parts, in the latter case with 4 or 3 parts of water. The dilute solution at night is rubbed into the face with a coarse flannel rag and left on the face over night; next morning the face is washed with water and soap. If the patient commences with 1 tablespoonful of the solution and 5 table-

spoonfuls of water, after 3 or 4 days he will take 1 to 4½ water, after 3 or 4 days more, 1 to 4 water, and so on diluting with ½ tablespoonful of water less, therefore increasing the strength of the remedy until it is used pure without evil effects. Should the solution be taken too strong from the beginning, dermatitis will be the result; while after the lapse of a certain period of time, varying with different patients, the pure solution is borne perfectly well; only a slight desquamation is noticeable in the morning, which can be easily concealed by a little cold-cream. Where there is a great deal of seborrhœa of the face combined with the acne, I found it advantageous to have the face first washed with water and soap and afterwards the lotion applied. A slight stinging sensation will follow the application, and its appearance is the signal to stop the rubbing. As a matter of course, first all pustules and comedones must be emptied by squeezing or by incisions, before the solution comes into use.

Several weeks are required in severe cases, in making inunctions of strong lather of castile soap or solutions of green soap, etc., before the skin is rid of fleshworms, and only then should the solution of Vleminckx be given. Also during the treatment with this solution the emptying of comedones must be continued, nay, after an accomplished cure this emptying is the only safe method to avoid recurrences.

According to the severity of the case, and the conscientiousness with which the patient attends to the squeezing out of the pustules and the comedones, several weeks or several months are required to obtain a cure, though on an average six weeks proved to be sufficient for this purpose. In most instances this treatment gives no guarantee against relapse, but if we tell our patients to keep up squeezing and resume the lotion as soon as a trace of the disease should show it-

self, the results are very satisfactory.

We have but a few good remedies for the treatment of acne, and amongst these doubtless ranks the solution of Vleminckx.*

There is a small percentage of cases in which the solution of Vleminckx did not answer at all, as new pustules appeared even during its application, and a still smaller percentage where the solution decidedly aggravated the disease. To what this is due I am unable to tell, but my impression is that there are patients who cannot bear any irritation of the skin without reacting with inflammation or suppuration. In such cases we must resort to a soothing treatment exclusively.

I consider the treatment of acne disseminata a successful one in a great majority of cases, and the advantage of the solution of Vleminckx is to gradually remove all pigment spots from the face and render the skin smooth and clean.

3. *Eczema Chronicum*, 14 cases, in which the solution was tried. This limited number is due to the fact that the short action of a caustic lotion does not prove so useful in the treatment of chronic eczema, as does the continuous application of irritating ointments and of the tar tincture. We know how stubborn a chronic infiltration of the skin, caused by eczema, is, and amongst the remedies for locally and cautiously irritating in order to produce a new inflammation and a gradual absorption of the products of the chronic inflammation, the solution of Vleminckx deserves mention. Hot sulphur baths have a well-established reputation in the treatment of chronic eczema, and patients who cannot visit a watering-place may just

* In March, 1880, Dr. Le Grand N. Denslow drew my attention to the usefulness of internal administration of ergot (fluid extract one-half drachm doses twice or three times daily), and I can fully corroborate the assertion of this gentleman as regards its speedy assistance in the cure of pustular acne.

as well pour the solution into the bath in order to obtain at least temporary relief. Nobody, I think, will promise a radical and permanent cure of chronic eczema, as nobody knows what the cause of the periodical recurrences is.

I have notes of 4 cases of chronic eczema of the scrotum, accompanied by severe itching, in which the solution, begun very dilute and gradually increased in strength, resulted in a cure of the disease. I know of only 2 cases in which the cure was a permanent one, extending over several years. In 2 other cases of eczema of the scrotum the solution seems to have done no good whatever.

4. *Pigment Anomalies*, such as lentigo, chloasma and vitiligo, I have treated with the solution in 9 cases, always foretelling the patient that the beneficial effect, the paling of the pigment spots, would be only a transient one. As the solution, if properly diluted, is entirely without unpleasant consequences, it may be applied, when the patient insists upon obtaining at least a temporary relief.

5. *Rosacea*, 36 cases, embracing acne rosacea, and the erythematous and hypertrophied forms. Of the latter form, no severe case had come so far under my observation. A cure was obtained by the application of the solution in 29 cases, and improvement in 7 cases. Amongst the cured cases a number have shown brilliant results, speedy and complete, to such a degree that I consider the solution as one of the best means if not the most powerful remedy in the treatment of rosacea. The plan adopted was identical with that laid down in the remarks upon acne disseminata, viz: the patient begins the lotions, preferably at night, very dilute (1 to 5 water) and gradually increasing the strength of the solution by reducing the amount of water added. If acne pustules be present, or the sebaceous glands dilated, their emptying every

night, before the lotion be applied, is a very important feature, and this method alone is sufficient to make the dilated blood-vessels contract and the newly-formed ones disappear. Bad cases in ladies' faces, extending far over the cheeks, have completely yielded within a relatively small number of weeks. The hypertrophied form, if present in a mild degree, can also be reduced and in turn the nose obtains its normal size and color. No internal medication is required to obtain these possible results.*

6. *Tinea Tonsurans*. Only a limited number of cases, in which the solution apparently had no marked effects.

Tinea Versicolor, 11 cases, all cured within a few days by the application of solution of Vleminckx, diluted one-half with water. The solution is certainly preferable to the sulphurous acid, whose offensive vapors are rather repulsive. I do not know of any remedy, and I have tried pretty nearly all recommended, which would render the skin normal in such a short time, as our solution does.

8. *Scabies*, 6 cases only, all cured: A Prussian savant travelling in South America, acquired the disease in the bed of the captain of a ship; the daughter of a physician on a trip through Ireland, got scabies in the bed of a hotel; a waiter on a trip from Newport to New York became scabious in the berth of a steamer, and gave the disease to two of his brothers, all sleeping alternately in one bed; the origin in the sixth case was not traceable. The rubbing in of the lotion, diluted one-half with water, all over the body, with special care to the places known to be the favorite seat of the mite, produced a cure in three to four days, without interruption of business. In one case

*Ergot, as recommended internally by Dr. Le Grand N. Denslow, also in several Rosacea cases, seems to have acted in a beneficial way, though good results seem to follow its use more in cases of acne disseminata than in Rosacea.

a very extensive eczema was present on both feet, and I applied—against the teaching of experienced scabies-curers—the solution, though in a very dilute state. The eczema was cured in a short time.

NERVOUS DIARRHÆA OF CHILDREN.

BY WILLIAM LEE, M. D.,

Attending Physician to West End Free Dispensary for Children.

(Read before Clinical Society of Maryland,
November 18th, 1881.)

In an article published some months since in the MARYLAND MEDICAL JOURNAL, "On Diarrhœa in the Young, Its Varieties and Treatment," I mentioned as one of those varieties nervous diarrhœa, and stated at the same time that it was a wonder to me authors on diseases of children should not refer to the subject.

I believed then, and it has since been verified by me that the nervous system of many children, particularly those between the ages of 5 and 10, becomes so influenced by certain deleterious causes as to create an amount of nervous irritation, the result of which is diarrhœa, just as we often see chorea and other nervous troubles brought about.

Amongst the causes producing this condition, I have noticed over-fatigue of mind, also improper home-training and poor hygienic regulations; again, there are those children who are naturally of a nervous temperament, arising from hereditary influences. When a case of this kind is first seen the following history will be generally elicited:

The child has looked pale and care worn for some days, is very nervous and restless, sleeps badly, has lost flesh and has a constant desire to go to stool during the day; besides diarrhœa during the day it has 3 or 4 evacuations at night. A further inquiry will disclose that the child sometimes has headache during the day,

and that it often grits its teeth when asleep (I have often had my attention called to this habit in nervous adults). In these cases the abdomen was found free from pain and not unusually large, there was no fever detectable by the thermometer, notwithstanding the skin was dry and rough to the touch. Heart and lungs were upon auscultation and percussion found normal, with exception of such functional disturbance in the former, as palpitation.

In making a diagnosis of this form of diarrhœa, at first it might be supposed to originate from rectal irritation consequent upon piles or an attack of dysentery, but a careful examination of the rectum and inquiry as to a former attack of dysentery will decide if such is the case. Then again some of the symptoms taken together with the grinding of the teeth might lead to belief that the child had worms, but as all of the numerous signs laid down in books, by which to diagnose their presence in my opinion go for naught nine times out of ten, such a conclusion should not be too hastily drawn.

Permit me to say in passing that after quite an experience in the treatment of children's diseases, I most decidedly deprecate the giving of vermifuge mixtures to the extent they often are, for supposed worms, the bad effects of which many times may be seen.

The following is one of a number of cases I have notes of, and will suffice to illustrate what I call nervous diarrhœa:

Ellen G., age 5½ years, Irish descent, parents living and of a nervous temperament. First seen 2 p. m., May 9th, 1881; has been going to a private school for the past six months, and seemed in good health up to ten days ago, since then is very nervous and often complains of feeling tired; has had loose passages for four days and nights; goes to stool often without having the desired effect; sleeps badly

and grits her teeth when asleep. Has fallen off in flesh—present weight being but 35 pounds, which is five less than when last weighed, one month ago. The child looks pale and badly nourished, abdomen found not tumid or tender on pressure, lungs healthy, also heart, but very much excited, temperature normal but skin dry. Has no irritation of rectum and never has been known to pass worms.

Thinking there possibly might be some irritation in the bowels from improper food, I ordered the child to have at bedtime ol. ricini, ℥iiss; tinct. opii, gtt. ii; syr. limonis, ℥ss; diet to consist chiefly of milk and nutritious broth. May 10, 9 A. M., found she had had eight operations since last seen, the contents of those inspected being quite healthy, free from mucus and blood; other symptoms the same. Now ordered bismuth subnit., ℥iiss; tinct. opii, gtt. xxiv; syrup. zingiberis, ℥iss; mist. cretæ, ℥iiss. Teaspoonful in water every four hours.

Being called from home could not see the child for two days.

May 12th, 10 A. M.—Symptoms the same, except operations not so frequent at night. As the child seemed to be but little relieved by bismuth mixture, and as she complained very much of palpitation of the heart, it was discontinued, and she was ordered to take the following mixture:

R_x. Bromid. Potass., ℥iiss
Elix. Val. Ammon., ℥iv
Aqua, ℥iii

S. Teaspoonful in water between meals.

R_x. Tinct. Ferri Chloridi, gtt. 80
Tinct. Digitalis, gtt. 36
Strychniæ, gr. ¼
Elix. Adjutant., ℥iii
M.

S. Teaspoonful every four hours in water.

May 13th, 10 A. M.—Had but four stools, those during the day; sleeps better and not so nervous; continued treatment.

May 14th, 12 M.—But two stools since last seen; much more cheerful; nervousness all gone.

May 15th.—Did not see the child.

May 16th, 11 A. M.—Stopped former medicines. Apparently well, but as she had not increased in weight, I ordered comp. syrup. hypophosphites, in twenty-drop doses, three times a day, to be continued for four weeks, at the end of which time to report to me.

June 5th.—Was brought to my office and found to be much improved in appearance, also to have increased in weight eight pounds.

I am thus particular in mentioning about the weight of this little patient from the fact that by a careful observance of its loss or gain, in most diseases of children, we have a simple but sure means of enabling us to learn what progress, if any, is being made towards recovery.

SOCIETY REPORTS.

CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD NOV. 4TH, 1881.

(*Specially Reported for the Maryland Med. Journal*).

I. E. ATKINSON, M. D., President, in the Chair.

EPITHELIOMA OF COLON.—*Dr. Michael* exhibited a specimen obtained from a patient aged 54, the subject of chronic diarrhoea and of vomiting. She had a tumor in the left side of the abdomen, near the anterior superior iliac spine, but Dr. M. could not give the history of the case, having only been called on to perform the post-mortem examination. He found the intestines matted together by soft curdy adhesions. There was a considerable amount of pus in the pelvic cavity and lumbar region. A tumor was found occupying the site of the sigmoid flexure of the colon, 6 by 4 inches in length and breadth and 3 to 3½ thick. The tumor was directly continuous with the intestine above and below. There were no secondary deposits in the liver, spleen, kidney or stomach. A microscopical

examination by Dr Doerksen confirmed the epitheliomatous nature of the tumor.

PAROTID TUMOR.—*Dr. Tiffany* exhibited a specimen obtained from a healthy negress of 19, living in the country, who first observed, at the age of 9, a lump under the lobe of her ear, which had continued to increase until she came under Dr. T.'s care. She then presented an extremely hard lobulated, non-adherent and painless tumor in the parotid region, movable horizontally but not vertically. A T-shaped incision having been made, the mass was turned out of its bed without difficulty. Microscopical examination revealed glandular, fibrous and cartilaginous tissue. There was no hereditary history, nor any secondary glandular enlargements. The growth was not different from the ordinary glandular parotid tumor so called of this region. The parotid gland was not implicated in the growth, which was encapsulated; this was proven by the slight amount of hemorrhage, and by the fact that the strong fascia covering the parotid was not cut into.

Dr. Chambers thought the pressure upon the parotid for so long a time would be likely to cause such atrophy that it might not be recognizable.

MAGGOTS IN A CHILD'S EAR.—A child was brought to *Dr. Theobald*, who had suffered at intervals with intense pain in one ear since the previous day. The father had brought one maggot from the ear that morning by syringing; still the pain continued. On examination three or four maggots were seen crawling over the drum-membrane; these were syringed out, and after persisting a fly was also brought away. A soothing lotion alone was necessary after that. This child's meatus was unusually large and straight. The ear had been perfectly healthy before this occurrence and free from discharge. The pain was caused by the hook-shaped extremity of the insect. *Dr. Theobald* thought it probable that the maggots had been deposited, already preformed in the fly's body.

Dr. Bermann saw a woman, æt. 45, with ozoena, from whose nasal cavities he removed with the nasal douche about a half dozen maggots. Recently he had seen a man, complaining of pain in the ear, in whose ear he found one of the

queer-formed egg-bags deposited by cockroaches; the movement of this caused excruciating pain.

Dr. Atkinson.—Flies may retain eggs within their bodies for a very long time, and should they not find a suitable place to deposit them, they hatch in them.

Dr. Theobald had found four flies in one ear this summer, and some years ago had found two in each year.

EXTERNAL RECTOTOMY.—*Dr. R. Winslow* read a paper upon this subject (published in last issue), and related several cases in illustration.

(*The following notes of a previous meeting have not yet been published*).

INTERSTITIAL KERATITIS.—*Dr. Theobald*, after remarking that Hutchinson was the first to assign this affection to its true cause—inherited syphilis—reported some of the results of his experience in it. The first case was seen on his return from Europe. On the suggestion of Prof. N. R. Smith, Swaim's panacea was prescribed, with rapid improvement as the result, the patient previously having been growing worse. He had used the same remedy in several subsequent cases with like favorable results. On analysing it carefully it was found to consist only of syrup of sarsaparilla and bichloride of mercury. The same agents had been used with equal or better results. *Dr. T.* had used, in many cases, small doses of the biniodide in combination with iodide of potash; the results were in the end satisfactory, useful or perfect vision being always secured. On scrutinizing his cases, however, he found that they did better while taking iodide of potash alone, several of those who took the biniodide growing worse instead of better. Hutchinson also believes the potash is the best. The dose of biniodide employed was 1-48 gr. to 1-16 gr.

Dr. Atkinson had come to regard the affection as not much under the influence of drugs. What good he had accomplished seemed to be due to the potash; yet he has seen the second eye become diseased whilst the patient was being treated for the other by iodide of potash.

It is true of keratitis as of syphilis elsewhere, the potash removes the lesions but does not cure the disease.

Dr. Michael said the affection in

question was one of the most obstinate eye lesions he had seen. At the Presbyterian Eye and Ear Hospital, the bichloride of mercury is generally used, often combined with iron; in some cases the salicylate of sodium and iron are given. He had had similar experience to that related by Dr. Atkinson—a second eye being affected whilst the other was being treated.

Dr. Coskery had prejudices in favor of mercury in all syphilitic cases. But there was no one fixed plan of treatment for all forms of syphilis. In the case of a young girl, however, with interstitial keratitis and laryngeal stenosis, leading to attacks of dyspnoea (threatening suffocation), improvement always followed the use of large doses of potash in the attacks; mercury failed.

ACADEMY OF MEDICINE.

STATED MEETING HELD NOV. 15TH, 1881.

(Reported for Maryland Medical Journal).

DR. RICHARD MCSHERRY in the Chair.

INTRACRANIAL MURMUR.—*Dr. Miles* reported the case of a lady, several months gone in pregnancy, who suffers from a loud buzzing in the head, which is audible not only to herself but to those who approach her closely. She has slight ptosis of the right eyelid, and partial paralysis of the external rectus. With the stethoscope the murmur is heard most distinctly over the right temple. On compressing the right carotid it ceases; this is obvious to both the observer and the patient. The first symptom attracting the attention of the patient was neuralgia about the eye. The diagnosis made was either an aneurism of the carotid at the point where it enters the skull through the petrous portion of the temporal bone or an osteophyte, in either case compressing the third nerve. Dr. Miles had met with two cases, previously, of these intra-cranial murmurs, both in children; in one there were head symptoms.

DIPHThERITIC PARALYSIS OF THE CILIARY MUSCLES CURED APPARENTLY BY ESERINE.—*Dr. Theobald* reported a case of paralysis of the ciliary muscles (paralysis of accommodation) following

an attack of diphtheria in a boy. There was also loss of power in the faucial muscles, and speech was very indistinct. The ciliary paralysis was complete. He gave the patient strychnia in 1-32 gr. doses for a week with only slight improvement. He then, in addition to the strychnia, the dose of which was gradually increased to 1-16 grain, prescribed eserine locally (gr. ii- $\frac{3}{4}$ i) twice a day for three days, then once a day for two days, making five days in all of treatment by this agent. The result was a prompt and complete restoration of accommodative power, and the recovery of perfect vision, which has remained permanent. There has also been improvement in the other paralytic symptoms.

ERYSIPELAS OF THE FACE CAUSED BY ATROPIA.—*Dr. Chisolm* reported the following case: A patient had been using instillations of atropia on account of a cataract. After the extraction of this she continued the use of the agent daily for a year without unpleasant effects. Lately, however, she has begun to suffer, after the applications, from erysipelatous inflammation of the face, a single application producing this effect six or eight times in succession. The same result followed in another case the use of homatropin.

ABSCESS OF LIVER (continued).—*Dr. McSherry* reported the further history of the patient whose case he related at the last meeting. After the aspiration of the large amount of pus, he felt greatly relieved and continued in good spirits for eight days, although with occasionally slight pains in the hepatic region. He then had shivering and fever, leading to apprehension of a refilling of the pus cavity or possibly incipient pyæmia. Dr. McSherry ordered for him carbolic acid (ten grains daily) with opium p. r. n. and a compress before and behind the body so as to bring the walls of the abscess together and try to secure their union. The result has been disappearance of the fever and the return of the condition of comfort, so that hopes are entertained of a complete cure. In looking up the records of the subject Dr. McSherry had not been able to find a single instance of recovery after the removal of so large a quantity of pus as was aspirated from this patient (85 oz.).

EDITORIAL.

THE EVIDENCE OF THE PARASITIC ORIGIN OF LEPROSY.—The rigorously scientific methods of investigation now in vogue are leading to wondrous developments in the knowledge of the essential nature of disease and naturally as a direct consequence in the means at our disposal for its prevention and cure. Thus day by day almost, facts are being accumulated establishing more and more firmly the reality of the germ theory. What was till lately only vaguely hinted at by a few shrewd conjecturers is rapidly being added to the domain of actual knowledge and no one can foresee the fruits of the labors of the scientists now engaged in these investigations, roused as they are to a veritable enthusiasm by the successes that have already been achieved and by the still greater promise of important discoveries yet to be made.

Among the diseases that have been subjected to this research is leprosy, an affection in regard to which, notwithstanding its great antiquity and well-known general characteristics, nothing has up to this time been acquired in the way of remedy, and (until very recently) scarcely more in regard to a knowledge of its essential nature.

The presence of living organisms in the tubercles of leprosy patients was first observed in 1867 or 1868 by Hansen, of Copenhagen. He found mobile rod-shaped corpuscles which he succeeded in cultivating, but failed to communicate the disease by inoculating them in animals. Klebs was one of the next to investigate them, according to whom their form and arrangement were totally unlike those of the organisms met with in other diseases. Neisser's researches are perhaps more thorough than those of any one else, embracing an examination of 21 cases, in every one of which he discovered the bacilli, which were especially numerous in the skin and mucous membranes. He also succeeded in cultivating them. He describes them (*Virchow's Archiv*) as very slender rods, about half or three-quarters the length of the diameter of the red blood corpuscles, straight or slightly curved and exhibiting movements when obtained from fresh specimens. They occupied not

only the large round lepra-cells described by Virchow, but were infiltrated generally through the tissues, either isolated or collected into groups; they were also found in the blood and in pus. Occasionally rods were found with globular enlargements at the extremities or in the middle, and some other slight variations of form were observed, probably due to the act of generation of spores by the parasite or to disintegration. The bacilli were found presenting identical characters in cases from various and remotely distant countries. In the case of two dogs, beneath whose skin pieces of freshly extirpated tubercle were placed, minute delicate new growths were found, a month after the inoculation, beneath the scar, crammed with these bacilli. Hillairet and Gaucher, have also recently cultivated them in France and have successfully inoculated them in animals. The results of still more recent observations by M. Cornil, were made known to the Académie de Médecine, of Paris, on October 25th. Besides the very slender and small rods from the tubercles of the skin, described by previous writers, and which require a power of 300 to 400 diameters in order that they may be distinctly seen, he had found them of much greater size in other organs, as the liver and testicle, which are soft and in the natural state contain cavities. Here they can develop in perfect freedom, without pressure or restraint, and they acquire in consequence a size five or six times greater than those of the tubercles of the skin, reaching a length of 12 to 13 thousandths millimetre. In the fibrous tissues, between the lamellæ and fibres of the cornea, in the neurilemma, in the sclerous tissue of a lymphatic ganglion, in the celluloadipose tissue, &c., the bacteria are interposed everywhere between these fibres and lamellæ; they are then disposed in long filaments arranged end to end, the articulations of which are separated by transparent intervals. These filaments, 100 to 150 thousandths millimetre in length, are sometimes straight, sometimes bent, and they exhibit the same general disposition as the filaments of the bacteria of splenic fever or charbon.

Finally, in the protoplasm of the cells,

in the detritus accumulated in the tubes of the testicles, in the blood vessels, spores are found free or collected in masses which fill in places the capillary vessels.

The observations of Dr. Bermann, of this city, to which we have previously alluded in this JOURNAL, correspond with those above quoted, and many of us have had the opportunity to examine his specimens showing the groups of minute straight or curved bacteria (rods) together with the oval lacunæ in the tissues, caused by their ravages.

Owing to the difficulty of cultivating organisms of such extreme minuteness, and to the alleged non-responsiveness of animals usually employed in such experiments to inoculation with them, it is not likely that the same demonstration of their relationship to leprosy will be obtained, as in the case of the corresponding organisms, which M. Pasteur has shown to be the cause of charbon or splenic fever; nevertheless, the facts already adduced render the connection in the highest degree probable.

The germ origin of leprosy carries with it, necessarily, the communicability of the disease, a point which has been hitherto the subject of such conflicting views. The importance of establishing this question is obvious when we consider the fatal character of the disease, and its development and extension in recent times in several countries where formerly it was entirely unknown. That it is not more contagious than it is may be due to the barrier to the escape of the bacilli and their germs, formed by the impermeable layers of epidermic cells overlying them, a consideration whose significance is attested by Neisser, who failed to discover any organisms in the epidermis. Some writers, however, maintain that the usual mode of conveyance is by sexual intercourse.

WORK WITH THE MICROSCOPE.—

The histological demonstrations at the last meeting of the Clinical Society seem to us of sufficient importance to demand more notice than will be secured by the brief report of the meeting. If we compare our society work in Baltimore with that done in the three great American cities north of us, Boston, Philadelphia

and New York (let us seek no lower standard of comparison), and still more with European cities, we find a marked deficiency on our part in that field, now so essential to a knowledge of our science, and in which the greatest discoveries and progress are being made, which relates to the intimate structure of tissues, histology. Of gross pathology we have a fair showing, especially in the Clinical Society, but observations, either original or otherwise, in minute pathology, are rare, and, we regret to add, attract but little interest. Therefore, we welcome the example set upon the occasion referred to, even though it be by one not "native to the manner born," and hope that it may stimulate others to work in the same field. We must not forget that to keep abreast of the times, to build up for ourselves a name and fame among the many organizations of workers, so busily employed in unfathoming the mysteries of nature, in health and disease, throughout the civilized world, something more is needed than merely meeting twice a month, reporting or listening to the report of cases, often commonplace, and frequently presented in a careless and slipshod manner, reading or hearing read papers embodying possibly not a single new idea, but being simple compilations from textbooks which are accessible to all.

REVIEWS & BOOK NOTICES.

Transactions Mississippi State Medical Association. Fourteenth Annual Session held at Winona, Miss., April 6th, 7th and 8th, 1881. 8vo. Pp. 201.

This association, to judge by the evidence here given, seems to be in a very vigorous and healthy condition. It numbers 273 members, of whom between fifty and sixty attended this meeting, which will not appear to be so great a disproportion when it is known that the meeting was held in a small inland village and when the size of the State and the lack of large towns and cities are considered. The address of the President, Dr. W. F. Hyer, is devoted to a discussion of

the legislation needed to regulate the practice of medicine in the State and to put down quackery. He urges the importance of constant agitation of the subject, and of having *a law*, even though it be defective, since time will enable them to perfect it. He points to the good already accomplished by the association in securing the establishment of a State Board of Health, with an ample appropriation subject to its control. Next follows an address on the "Rights, Duties and Responsibilities of Physicians Before the Courts," by Hon. J. S. Morris, of Vicksburg, which, though brief, deals ably and eloquently with a subject of very great interest to the profession. Of the remaining articles, Dr. B. F. Ward furnishes an exceedingly good resumé of the modern views of the pathology of inflammation, pyæmia, tubercle and syphilis, and Dr. M. S. Craft a very creditable report upon the "Surgery of Mississippi," made up of contributions from various physicians in the State. Dr. W. Y. Gadberry presents an illustration and description of a new splint or fracture cot for fractures of the lower extremity. The proposal to establish a medical journal, under the auspices of the association, did not meet with favor, the committee to whom the matter was referred considering the project impracticable at this time. This volume does credit to the society which issues it, and points to much good work in the future.

Walsh's Physician's Call-Book and Handy Ledger for 1882. By RALPH WALSH, M. D., 332 C Street, Washington, D. C. Price, post-paid, 600 patients, \$3.00; 1200 patients, \$5.00.

We took occasion a year ago to call attention to Walsh's Call-Book and Handy Ledger as a most valuable aid to the busy practitioner in keeping his accounts. The plan of these books is so simple, so handy and complete that we can add no words of

praise which will express our appreciation of their usefulness and comfort to us. We have made use of the Handy Ledger in our practice since it first became known to us, and we must say it has been of great convenience and service. We know of no system of bookkeeping offered to the profession which we value as highly as this. It should form a part of every practitioner's library, as it will save not only time and labor in posting his accounts but ten times its cost in preventing confusion and loss from mixing accounts and visits.

The Therapeutics of Gynecology and Obstetrics, Comprising the Medical, Dietetic and Hygienic Treatment of Diseases of Women. By WM. B. ATKINSON, A. M., M. D. Second Edition. Published by D. G. Brinton, Philadelphia. 8vo. Pp. 571. Price: cloth, \$4.00; leather, \$5.00.

The second edition of this very useful book comes to us thoroughly revised, much improved, and enlarged by the addition of two hundred and six pages. The great activity in the literature of the subjects treated by this work has placed at the disposal of the editor a vast quantity of useful material from which to select striking facts and well founded experiences, in compact form, for easy study and reference. The editor has observed care and judgment in making choice, and has succeeded in securing for his book a most useful epitome of the more important diseases embraced in the gynecological and obstetrical fields. He has aimed to present the most modern and improved plan of treating the diseases considered, as set forth by the best authorities in this country and Europe.

The volume, as our readers perhaps know, is the third of the series of "Modern Therapeutics," originally projected by the late Dr. George H. Napheys. It is edited and arranged upon substantially the same plan as

the *Medical Therapeutics* and *Surgical Therapeutics*, two works well-known and popular with a great number of physicians.

A work of this character is designed more for useful and handy reference than to offer anything new or original. Thus, for example, in the study of a given disease we find by reference to the volume a resumé of the treatment employed in this disease by a large number of eminent practitioners. From these authorities the student may select the views best suited to his purpose or by comparison may formulate new ideas with special reference to the case under consideration. If not satisfied with these statements the student may go further and procure the works or journals from which the abstracts in this work are taken. The volume seems to us to possess a large value to those members of the profession who have not access to large libraries and whose means and facilities for study are limited. A physician may often desire to consult a number of authorities upon a subject. To do this he must necessarily visit some large library or else invest a large sum of money in books, which will represent but little value to him. It is in just such instances that a work of the character of the one here referred to has its useful purpose. For a small investment a large store of useful knowledge is made accessible, and a variety of views and the experiences of the best authorities in practice are ready at hand. If wider study is desirable, reference may then be made more judiciously to such authorities as the student may select.

The Popular Science Monthly for December, 1881. New York. D. Appleton & Co. 50 cents single number; \$5.00 per annum.

The *Popular Science Monthly* for December contains a number of interesting and instructive papers upon a variety of subjects, among which

we notice the following as of special interest to the profession:

"Physical Education." By Felix L. Oswald, M. D. "The Rise and Progress of Paleontology." By Prof. T. H. Huxley. "Equality and Inequality in Sex." By G. Delancy. "A Half Century of Science." By Sir John Lubbock. "Disease Germs." By W. B. Carpenter, M. D. Sketch and Portrait of Dr. Paul Broca, the eminent anthropologist.

The "Popular Miscellany" and "Notes" contain briefer notices of scientific facts and ideas which are worthy of study. At this season of the year, when magazines are generally chosen, we know of no periodical we can more heartily recommend than the "Popular Science Monthly."

MISCELLANY.

ON THE RELATION OF ANTEFLEXION OF THE UTERUS TO DYSMENORRHOEA.—Dr. Herman read a paper on the above-named subject before the Obstetrical Society of London, October 5th, 1881. The subject of this paper was to inquire as to the correctness of the widely accepted theory that antelexion caused dysmenorrhœa by leading to narrowing or temporary occlusion of the uterine canal at the point of bending. We abstract from the *British Medical Journal*, October 20th, the following summarised propositions offered by Dr. Herman in support of his views: 1. There is no anatomical evidence that antelexion causes any hindrance to the escape of menstrual fluid. 2. There is reason to think that well-marked antelexion is present in nearly half of all women who have not borne children. 3. Therefore, it is to be expected that antelexion and dysmenorrhœa would frequently coincide. 4. Dysmenorrhœa is practically as common when the uterus is straight as when it is antelexed. 3. Painless menstruation

is practically as common when the uterus is ante flexed as when it is not. 6. When dysmenorrhœa and flexion go together the severity of the pain bears no relation to the degree of bending. 7. Dysmenorrhœa associated with ante flexion is frequently cured without straightening the uterus. 8. There is no evidence that straightening the uterus invariably or even frequently removes dysmenorrhœa, which is associated with ante flexion, and in which other methods of cure have been ineffectual. 9. These facts show that the relation between ante flexion and dysmenorrhœa is not that of cause and effect but merely that of coincidence.

ASCITES DUE TO CHRONIC OVARITIS.—Alban Doran, F. R. C. S., reports a case (*British Medical Journal*, October 29th, 1881) of hydroperitoneum traced to chronic ovaritis in a patient 23 years of age, unmarried, admitted to the Samaritan Free Hospital in November, 1879. Nine weeks previous to admission her abdomen began to enlarge, with free fluid. The distension causing dyspnœa, she was tapped and relieved of four and a half gallons of fluid. A week after the abdomen began to enlarge again. She was carefully examined for cardiac and pulmonary disease but none could be detected. No enlargement of the liver or of any other organ, nor any tumor could be observed. The patient looked healthy, appetite good, bowels regular. The case being so obscure, Dr. Bantock made an exploratory incision. Twenty-two pints of ascitic fluid escaped. Dr. Bantock found the liver quite healthy to the eye and touch; he could not detect any enlargement of the kidneys, nor any tumor either in the abdomen or pelvis.

For no apparent reason menstruation, which commenced at fifteen and continued with perfect regularity for two years, had ceased entirely for six

years. This led to a suspicion of some form of ovarian disease existing as the cause of the ascites. The ovaries were found very irregular, hard and warty, much paler than natural, and on palpation presented a semi-cystic character. Dr. Bantock removed the ovaries and the patient recovered. The ascites has not returned.

"There can be little doubt," says the reporter, "that in this case ascites was due to inflammation of the pelvic peritoneum, and there is strong evidence leading us to believe that the morbid process commenced in the ovaries."

CLINICAL SOCIETY OF LONDON.—At the first meeting of the Clinical Society of London, after the autumn vacation, held October 14th, Mr. Lister, the President, announced that the council had decided to recommend the society to commemorate the recent meeting in London of the International Medical Congress, by the election of several honorary members. The following distinguished persons were recommended: Sir James Paget, of Great Britain; Prof. H. J. Bigelow, of Boston; Dr. J. S. Billings, U. S. Army; Prof. Esmarch, of Kiel; Prof. Volkmann, of Halle; Dr. Verneuil, Prof. Ollier and M. Pasteur, of France; and Dr. Pantaleoni and Prof. Mazzoni, of Italy.

EARTHWORMS THE CONVEYERS OF SPLENIC FEVER POISON.—Pasteur is said to have gotten his clue as to the manner in which splenic fever (charbon) is spread, through an observation of Baron Seebach, Saxon minister at Paris in 1865. A sheep that had died of the disease was buried in the corner of a field, which was subsequently sown with clover. A poor woman on the Baron's estate stole some of this clover and gave it to her goat and cow; the next day she came weeping to tell him that her goat had just died, and that her cow

was very ill. Upon examination, it was found that they had died of splenic fever. Reasoning how this could have occurred, Pasteur came to the conclusion that earthworms were the conveyers of the germs of the disease in their passage to the surface; this proved correct, the bacteria being found in the bodies of the earthworms and also in the soil, in which they had deposited them with their excrement. —*Cameron, Brit. Med. Journal.*

DR. J. MILNER FOTHERGILL ON USE OF MALTINE.—In order to aid the defective action upon starch by the natural diastase being deficient in quantity or impaired in power, we add the artificial diastase "maltine." But, as Dr. Roberts points out, in order to make this ferment operative it must not be taken after a meal is over. Rather it should be added to the various forms of milk porridge or puddings before they are taken into the mouth. About this there exists no difficulty. Maltine is a molasses-like matter and mixes readily with the milk, gruel, &c., without interfering either with its attractiveness in appearance, or its toothsome-ness; indeed its sweet taste renders the gruel, &c., more palatable. A minute or two before the milky mess is placed before the child, or invalid, the maltine should be added. If a certain portion of baked flour, no matter in what concrete form, were added to plain milk, and some maltine mixed with it, before it is placed on the nursery table, we should hear much less of infantile indigestion and mal-nutrition.—*From the Practitioner.*

FILARIA SANGUINIS HOMINIS AND CHYLURIA (MILKY URINE).—Filariae were first discovered in the urine in 1866. In 1872 Lewis found them in chyluric patients, and other observers in various tissues. Bancroft, of Australia, next discovered the sexually mature worm, $3\frac{1}{2}$ inches long, in

a lymphatic abscess in the arm. Fourth, Manson discovered that the mosquito was the intermediary host, and fifth that there was a periodicity in the appearance of the parasite. The filariae disappear from the blood during the day, but appear in numbers at night. It is remarkable that their appearance should correspond with the visits of the mosquito. This insect forces its proboscis into the capillaries of the skin and catches the filariae and removes them in masses from the blood. The evidence now is strong that lymph scrotum, chyluria, &c., are produced by the filariae. Change of meal times did not affect the periodicity, but reversing the period of being in bed and of being up completely reversed the time of appearance and disappearance of the parasite, which was then found only in the day. The filaria measures from 1-120 to 1-70 inch in length and 1-2500 to 1-3875 inch in breadth. When freshly drawn from the blood they are in a very active condition, twisting and wriggling about like eels, and lashing the blood corpuscles with their tails. Mosquitoes gorged with filarial blood, from China and Australia, were shown under the microscope. —*Pathological Society of London. Lancet, Oct. 22.*

FOREIGN BODIES IN BLADDER.—A published list of foreign bodies introduced into the bladder (of both sexes) includes the following: 78 portions of catheters and lithotrites, 82 needles, pins, or tags, 6 bone or ivory needles, 6 ear-picks, 3 ivory whistles, 1 ivory spindle, 1 ivory stiletto handle, 15 leaden balls, 3 small keys, 8 metallic fragments of various kinds, 12 bones or splinters of bone, 12 pieces of pebble or china, 6 pen-holders, 15 needle-cases, 12 pieces of tobacco pipes, 4 pieces of glass tubing, &c.

TRAUMATIC RUPTURE OF AN OVARIAN CYST.—A lady, aged 28, fell while in

a hansom cab, struck her abdomen and burst an ovarian cyst, which she had had about three years. Severe shock and collapse ensued, but under opium and restoratives she slowly recovered, and two years after the accident remained quite well and free from the tumor, with the exception of a small mass supposed to be the remains of the collapsed cyst and pedicle.—*Clin. Society of London. Lancet, Oct. 22.*

THE ACHIEVEMENTS OF LISTERISM.—The following results are claimed for Listerism: The disappearance of wound accidents even in the worst circumstances; a regularity in repair hitherto unknown; surgery without suppuration; union by first intention habitually and without danger; such rapidity in healing as to surpass all anticipation; the possibility and safety of operations hitherto considered dangerous and unjustifiable.—*Lucas-Championniere's Antiseptic Surgery.*

FOREIGN VIEW OF JOHNS HOPKINS HOSPITAL.—By far the most important of all the hospital constructions in the great Republic is the Johns Hopkins Hospital at Baltimore. It is the outcome of a munificent bequest, is to be attached to a great medical school, and is being arranged under the advice and supervision of Dr. John S. Billings. It stands on $14\frac{1}{2}$ acres of ground, bounded by streets on all sides, and is strictly on the pavilion plan, complete in all particulars. In it are to be illustrated all the most advanced views in hospital construction and arrangement. It will probably still take some years to complete, and changes will doubtless be made in many of the details during the progress of the building. It promises to become one of the finest institutions of its kind and class in existence.—*Mouat on Hospitals, Lancet, July 30.*

A CASE IN WHICH TREPHINING WAS DONE FIVE TIMES.—The patient was a mulatto, æt. 29, who was knocked senseless by a piece of iron-ore in 1875. The blow was received about the occipital protuberance. He was totally blind for about two months, then apparently recovered and worked for two years, when he began to suffer severe pain at the site of the previous injury. A small tumor appeared, which continued to increase, as did the pain. A physician punctured the tumor, blood escaping. He was then trephined for compression, afterwards recovering and returning to work. He was well for one-and-a-half years, when the old symptoms returned and he was trephined in another place; symptoms of epilepsy followed the healing of the wound. Six months later the operation was repeated, when a cup-shaped piece of bone was found filling the hole made by the last operation, and which pressed on the brain. There being no relief, six weeks later a triangular piece of carious bone was removed. The patient then resumed work and was not troubled for some months. The severe pain in the head, however, returned and a fifth operation was performed, a piece of necrosed bone being removed. Great relief ensued with improvement of health. A little pain remained, which was relieved by 15 gr. doses of iodide of potassium. A month later he resumed work again. Four months subsequently there was a sequestrum of bone at the site of the operations which was too firmly attached to be removed. The patient stated that he never had syphilis. The absence of pus in the case was interesting.—*Dr. P. B. McCutcheon, N. O. Med. and Surg. Journ., Oct.*

A death from the local use of pyrogallic acid in general psoriasis (a ten per cent. ointment) is reported from Breslau.

SEWAGE IN OVSTERS.—An examination of some oysters taken from the Bay of Dublin shows that in a large proportion of them the brine had a distinctly foetid odor, whilst in a few cases there was a strong and unmistakable odor of sewage. The liquid in the oysters was found to swarm with micrococci and other low organisms similar to those usually present in sewage. This condition is attributed to the discharge of many large sewers into the Bay. It is suggested that this oyster juice may serve as the vehicle for the dissemination of the germs of typhoid fever.—*Cameron in Chemical News.*—*Sanitary Engineer.*

THE introduction of the magnet for the purpose of removing fragments of steel and iron from the eye, and for their diagnosis, is a considerable step in advance, and we are now in a condition to save many an eye which would otherwise be irreparably lost.—*Pagenstecher.*

FIDDLE-STRING AS A BOUGIE.—*Dr. F. E. Daniel*, of Jackson, Miss., failing in a case of very tight stricture to get in the smallest ordinary bougie, used in the emergency a small *fiddle-string*. This passed in readily. Being withdrawn in a few minutes it was found to have swollen to nearly twice its previous size. A larger one was then passed and allowed to remain fifteen minutes; this being then withdrawn, the urethra was sufficiently dilated to get in a No. 4, then a No. 6 bougie, and finally a flexible Nelaton's catheter, threaded on a fiddle-string. A second case was equally satisfactory. *Dr. D.* claims for the fiddle-string (catgut) cheapness, simplicity, availability, harmlessness, strength and rapid expansion.—*Trans. Miss. Med. Ass'n*, 1881.

WASHINGTON TRAINING SCHOOL FOR NURSES—The fourth session of the Washington Training School for Nurses was opened with an address by its indefatigable patron, *Dr. Toner*. This institution bids fair, under the zealous lead of this gentleman to accomplish

great good in a newly-cultivated field, and in time to grow to very respectable proportions. The Doctor described a very interesting interview which he had last summer with Miss Florence Nightingale in London. The Washington Training School is maintained by voluntary subscriptions, and the lectures are free. It is contemplated to have a promenade concert for its benefit during the approaching holiday season. Hopes are entertained of finding a home for the nurses in the proposed National Garfield Memorial Hospital.

EXCISION OF TONGUE FOR EPITHELIOMA.—*Whitehead* reports a case of excision of the entire organ by the galvanic écraseur, in a woman æt. 69. She is now, nine years after the operation, in perfect health, without having had any sign ever of a return of the disease. Her brother had previously died of epithelioma of the lip. *Buchanan* has recently published a case of a similar interval of fifteen years. *Billroth* had two patients who had lived, after the operation, five years and seven months, and four years, respectively. A man operated on by *Nunneley* lived four years and died of an independent disease. *Hutchinson* has four patients living and well three years or more after the operation. These cases suggest, at least, that if the whole of the disease is removed reasonable prospects of permanent cure may be entertained.—*Lancet*, Oct. 29.

MEDICAL ITEMS.

THE State Sanitary Convention, which was to have been held this fall, has been postponed until next spring.—*Lawson Tait* recants all that he has hitherto said against drainage in abdominal surgery and now employs the drainage tube habitually in his operations.—*Dr. Theobald* recommended for insufflation in suppurative otitis a powder composed of equal parts of boracic acid and oxide of zinc.—*Drs. John Morris and James A. Steuart* will represent the State of Maryland at the Am. Public Health Ass'n., which meets in Savannah, Nov. 29th to Dec. 2nd.—*The New England*

Medical Monthly is the title of a new medical journal published at Newtown, Connecticut. Dr. Wm. C. Wile is editor.—Lawson Tait speaks of Listerism as "one of the largest, best-blown and most attractive bubbles ever displayed to a surgical audience."—The University of Oxford was founded 886; Cambridge, 1110; Glasgow, 1450; Edinburgh, 1582; Dublin, 1593; London, 1836.—Dr. H. Derby, of Boston, has invented an electro-magnet for the removal of foreign bodies from the eye. Several prominent oculists have used it with success and testify to its value.—A picture by Barraud, containing 500 portraits of members of the Int. Med. Congress, is nearly completed.—Dr. Wilks exhibited to the Path. Soc. of London, Nov. 1, an ear of corn which had been discharged from an abscess over the scapula of a girl; he had but little doubt that it been inspired and then made its way out through the chest walls. The patient recovered. Dr. White reports a similar case, in *N. Y. Med. Record*, in which a head of rye was extracted 109 days after being swallowed.—Lawson Tait believes that if ovarian tumors were never tapped 98 per cent. of recoveries would be the rule in ovariectomy.—A movement to amalgamate the medical societies of Dublin has been set afoot and gives promise of success.—Erasmus Wilson has been knighted on account of his munificent gifts for the support of hospitals and the encouragement of medical study.—Hammond gives pure bromine in drop-doses, in epilepsy, with the same effect as from the bromides. *R. Bromini*, 3 i; *aq.*, 3 viii; teaspoonful thrice daily, diluted. Jewell confirms Hammond's statement and adds that some patients will bear the bromine alone well who cannot take it in combination.—"The next case of peritonitis to which I am called, of whatever sort it be—even puerperal—I shall advise, and perform, if allowed, abdominal section, shall cleanse out the cavity and drain it."—*Lawson Tait*.—Lunacy is said to be unusually common in the little pent-up Isle of Man, being attributable to the frequent intermarriages of the inhabitants.—In view of the frequency of tuberculosis in cattle, and its recent experimental communication to other animals by inoculation, a possible danger

from this source from the use of bovine virus has been suggested.—Prof. Joseph Bouillaud died at Paris, Oct. 29th, æt. 85.—Dr. David Foulis, of Glasgow, died Oct. 31st, æt. 35, of diphtheria contracted, it is supposed, while performing tracheotomy on a patient suffering with that affection. His successful cases of extirpation of the larynx had given him a world-wide celebrity.—Dr. W. F. Jenks, of Philadelphia, died Oct. 31st, æt. 39.—Benedikt (*Centralblatt f. Chirurgie*) reports three cases of stretching of the sciatic for locomotor ataxy, all remarkably improved, not only as regards the pains and other disturbances of sensation, but also in respect of the ataxy, paralysis of the bladder and amblyopia. Also of the facial for long standing paralysis with secondary *tic spasmodique*; the tic was relieved and there was also a strange improvement of the paralysis. The editor of *Med. Times and Gazette*, Nov. 12, commenting on the above, says the results of the operation have not been so favorable in England as those reported by the Germans.—Lawson Tait has performed ovariectomy 51 times in the last 12 months, with but two deaths, one in a very weak patient from suffocation by vomited matters getting into the wind-pipe; he believes he might have saved the other had he used drainage.—The Philadelphia *Medical Times* is mistaken in supposing that nothing has been done towards maintaining the *Index Medicus* outside of Philadelphia; at least one of our Baltimore societies has contributed to it to the extent of subscribing for two copies.—Subscriptions are being made in Germany, England, &c., for the purpose of securing a fund (to be styled the "Rudolph Virchow Stiftung," in honor of the 61st birthday and 25th professorate anniversary of the great German physician) for the promotion and furtherance of scientific research, bearing especially on the study of man.—To check inflammation of the middle ear in acute cases, Dr. Theobald recommends instillations, three or four times a day, of a four-grain sol. of atropia.—Abadie, of Paris, regards spasm of the upper eyebrow as pathognomonic of exophthalmic goitre, which causes the superior portion of the sclerotic to be exposed on looking downward.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

NOTES OF THE RECENT INTERNATIONAL MEDICAL CONGRESS IN LONDON.

BY CHRISTOPHER JOHNSTON, M. D.,

Emeritus Professor of Surgery, University of Maryland.

(Read before the Clinical Society of Maryland, November 18th, 1881.)

In the spring of this year, 1881, my mind, somewhat fatigued with the monotony of a professional and active life, ventured to propose to itself, but vaguely, a hegira to some distant lands where climate, manners of people and language were all unfamiliar, although well remembered, and where by day its untravailed side would be at work without responsibility, and by night it might repose in peace and undisturbed by tintinabulation. Perhaps the fact that the mind could thus look forward to or towards repose for a short season gave to possibility a more definite form; and perhaps also the dream, which at first was as unsubstantial as Anne of Gierstein, who was Maid of the Mist,

acquired substance as the dreamer conned over his dream.

And it may have been that the mind might have yearned, and the dream have been dreamed, all in vain, had not a new factor given impulse and determined the exodus. This was my appointment in the month of April, by the eminent President of the Medical and Chirurgical Faculty of Maryland, as one of the delegates to represent that distinguished body upon the occasion of its seventh session in the city of London. And if afterwards the American Medical Association honored me by making me one of its representatives to the same congress, it was not until after my departure hence had been fixed upon in consequence of the action of the Faculty of my own State, and my stateroom engaged and my name registered among the passengers of the steamship Germanic to sail on the 9th of July.

On the day appointed, the steamer left her quai in New York; on the morning of the 18th she lay in the offing of Queenstown; and on the morn-

ing of the 19th the Germanic dropped anchor in the Mersey opposite to Liverpool. I set out immediately for Scotland, the land of mists and rain, and also of glorious sunshine, and tarried there awhile, passed down the east side of England, visiting the great cathedrals of Durham, York and Lincoln, and arrived in London on the evening of the 1st of August, the eve of the session of the great Congress. And great it was; and the hum of preparation had made itself heard wherever medicine was recognized as an art and science, that is to say, throughout the civilized world. For eighteen months the Honorary Secretary-General MacCormac, since knighted for the perfection as well as vastness of his labors in organizing and systematizing the immense business of the approaching meeting, had been occupied with reviewing the former *sixth* congress held in Holland; opening communication with most of the physicians and surgeons of credit at home and abroad; arousing or creating an interest in the universities, colleges and medical societies as well as the profession throughout England; securing accommodations for general sessions of the congress as also for the numerous sections; devising or promoting plans for the edification or recreation of the members; guiding the generous hospitality offered long in advance by the medical profession, the great city corporation and titled and untitled laity; and lastly to be here noticed, directing the preparation and publication in a royal octavo volume of 720 pages of "Abstracts of the Communications to be Made in the Various Sections." And this last in the three languages, English, French and German.

It may be interesting here to state that the first meeting took place in Paris in 1867, under the Presidency of Prof. Bouillaud; the congress next met in Florence in 1869, Prof. de Renzi occupying the chair; then in

Vienna in 1873, Prof. Rokitsansky being President; in Brussels in 1875, with Prof. Vleminckx as President; in Geneva in 1877, under the Presidency of Prof. S. Carl Vogt; and in 1879 in Amsterdam, as already stated, Prof. Donders being the Presiding Officer.

The seventh (7th) session of the International Medical Congress was to be held in England for the reason given in the circular issued from London in September, 1880, that "at the close of the sixth session of the congress, held last September in Amsterdam, under the Presidency of Prof. Donders, of Utrecht, a unanimous desire was expressed that the next meeting should take place in London. And at once the Presidents of the Royal Colleges of Physicians and Surgeons in London convened delegates from the various universities, colleges and other public bodies of the United Kingdom, and obtained a most cordial compliance of the wish expressed at the sixth congress in Amsterdam, and adopted measures to carry out the necessary details. So thoroughly national was the representation of feeling and opinion that the necessary work, although arduous, was urged forward with the certainty of great success; and in the language of the circular referred to, "Her Majesty the Queen gave proof of her good will towards the cause of medical science, and of the efforts in its furtherance, by authorizing the congress to be placed under Her Royal Patronage;" and "His Royal Highness the Prince of Wales showed the unvarying interest he takes in the progress of medicine by according a similar favor."

On the morning of the 2nd of August, as on previous days, the Royal College of Physicians on Pall Mall East, near Trafalgar Square, presented a scene of the liveliest animation. Streams of hansoms and four-wheelers converged at its portal, and depositing their fares, departed with or

without persons inside. The stream of ingoing people were eager, anxious, and with hands free; the outgoing more tranquil and bearing away pamphlets, a huge octavo in paper binding, some newspapers, and a half score of envelopes of more or less considerable size. Many wore spectacles or pinches, all had silk stove-pipe hats, and everybody had that air and expression which singularly distinguish the medical profession. And so it was that members of the congress flocked to the Royal College of Physicians as being the central bureau for the registration and issuing of tickets of membership, of tickets or cards of invitation through an improvised post-office to conversaciones, garden-parties, excursions or dinners, awarded with more or less prodigality to registered members, and for the distribution of a limited number of tickets to places of interest for different days to such as backed their application with the presentation of their membership ticket.

Separate books of registration were opened for foreign and for native physicians, and polyglott young medical gentlemen very patiently and kindly discharged the duties of secretary, registrar and allotter of the coveted cards of admission.

In the hall near the post-office vast stacks of the "Abstracts" awaited demand and delivery upon the showing of the ticket; and on the other side all manner of notices written upon paper or the blackboard, or staring more conspicuously in printer's ink, attracted attention, conveyed information or guided action.

To the hall above a few persons in authority penetrated, and these were committees having in charge the reception of the members of the congress, a reception of welcome from England to all comers, not with living hands, eyes and hearts only, but by counterfeit presentment upon the walls

also as of Sir Henry Thompson by Millais, and of other dignitaries

"Whose deeds were just,

"Whose arms are rust,

"But whose souls are with their God I trust."

The morning of Wednesday, Aug. 3rd, gray and sombre as it was, waked matutinal members of the congress to a sense of the great work which was on that day to be inaugurated, and this suggested an early breakfast and repair to St. James' Great Hall, Picadilly and Regent Street, in time to secure places at first and entrance on any terms afterwards. Alertness was indeed necessary, for, at ten or thereabouts on the preceding morning, my membership ticket bore the number 2183, and accessions had been going on all day. But on this Wednesday the registered quickly crowded the hall, while the others strove to obtain their card and effect an entrance into the great hall before the hour of eleven, for those only who had oil in their lamps were admitted to the feast.

By eleven o'clock the body of the hall was full, save the places reserved at the upper end, and the galleries could hold no more. Little by little the privileged occupied their seats, and by ones and twos the illustrious took places upon the platform, and on benches rising behind it into a deep recess. The divinum vulgus caught recognition here and there and in noisy whispers sent great names flying about. There is Donders! That is Billings! This is Pasteur! That His! That Charcot, Flint, Kölliker, Virchow, Lister, Jenner, Owen, Spencer Wells, Burdon-Sanderson, Sir James Risdon Bennett, John Erich Erichsen, Sir William Gull, and primus inter pares Sir James Paget, Bart., the President that was to be of the Congress. Great bishops, also, of the Church of England, sate among the great, and Cardinal Manning, all in-

telligence, occupied a fauteuil. Each celebrity as he entered was warmly received by the audience, but Pasteur, Lister, Sir James Paget, Virchow and Huxley, were enthusiastically welcomed, and their names afterwards cheered whenever mentioned.

The buzz of conversation grew loud and interest was at its highest, when from a side door on the Regent Street side a half dozen ladies issued and found their way to the gallery. They were, as we afterwards discovered, Lady Paget, and the wives of some of the officers of the congress, the position of whose husbands accorded to them as ladies the privilege which were refused to all others of their sex.

Presently the rattle of conversation and inquiry ceased abruptly as H. R. H. the Prince of Wales mounted the platform, and acknowledging the rising salute of the whole company, with a wave of his hand motioned those standing to resume their seats.

The chair was taken by the chairman *ex-officio* of the general committee, Sir William Jenner, President of the Royal College of Physicians, who made a short but pointed speech having reference to the circumstances leading to the present convention in London.

Next followed the report of the executive committee read by Mr. MacCormac, Honorary Secretary-General, giving account of the labors of that distinguished body and rendering reason for certain courses adopted.

In the next place the constitution of the Congress and the election of officers were proposed by Sir J. Risdon Bennett, chairman of the executive committee, and seconded by Prof. Donders, President of the Congress of 1879.

The election now took place.

Sir James Paget, President, upon taking the chair, was greeted with long and most enthusiastic applause. And then as the successive nomina-

tions made by the executive committee were acted upon, more or less hearty greeting was accorded to the thirty-five Vice Presidents of the Congress, all men of the highest ability and standing in the three kingdoms, and to the Honorary Vice-Presidents, forty-six in number, of whom four were Americans—Billings, Fordyce Barker, Austin Flint and Bigelow. But however loud was the welcome of these gentlemen, it was, indeed most decided when Pasteur, Virchow, Donders and Charcot appeared upon the platform, even as when the Prince of Wales, and afterwards the Crown Prince of Germany, took places on the right and on the left of the President.

The active patron of the Congress, the Prince of Wales, in simple attire and without orders, now rose amid cheering, and read a short speech in which he discussed with approval the objects had in view by the Congress, which he declared open.

The President, at this point, announced the award of the great commemoration medals which had been struck, presenting one to the Prince of Wales, one to Billings, to Donders, to Virchow, to Pasteur and to Paget. And then was reached the supreme moment of interest, and the assertion of most solemn dignity. Imagine an audience of men largely representative of our profession filling a vast hall and its galleries, and facing an Olympus of the Gods of Medicine, or, at least, of men illustrious, rising upon successive grades in apotheosis. And see in that august assembly the President, the elect of this great assembly, assume his station, and amid breathless silence, nervously gaze about ere his parted lips could utter a sound. Tall, thin but not meagre, erect but not rigid, he stood. His head rather small but compactly formed, his hair gray, short cut and parted on one side, his features sharp but regular, his mouth large, decided yet nervously twitching, his eye keen,

bright, intent and eager, fixed at will or flashing as showing the alertness of his mind—such was the appearance presented by Sir James Paget as he stood surrounded by most of the truly great of the profession which he so eminently adorns, and between the apparent heirs of the two great empires of the civilized world.

Without pause or hesitation, without refreshing inspiration of printed proof, the President delivered a most admirable address, of which the theme was "the work which, being in Congress, we have to do, and the spirit in which it may best be done, so that the good effects of our meeting may last long after our parting." How well was the task performed, how charming its performance. "And then," said he, "let us always remind ourselves of the nobility of our calling," he that is one of its chiefest noblemen whose life declares him to be one of those very "learned and the good who strive to make the future better and happier than the past." * * * "To this we shall attain," continuing the quotation, "if we will remind ourselves that as in every pursuit of knowledge there is the charm of novelty, and in every attainment of truth utility, so in the use of it there may be charity. I do not mean that charity which is in hospitals or in the service of the poor, great as is the privilege of our calling in that we may be its chief ministers, but that wider charity which is practised in a constant sympathy and gentleness, in patience and self-devotion."

And with such loving words did he carry his auditory with him, and ended with the following: "Let us, then, resolve to devote ourselves to the promotion of the whole science, art and charity of medicine. Let this resolve be to us a vow of brotherhood; and may God help us in our work."

Loud and long were the acclama-

tions which followed the closing of this address, and the most memorable event of my professional life had become a thing of the past. The International Congress, unexampled for its combination of great and varied ability, had been opened; Paget, unsurpassed for the largeness of his thought and the charm of his diction, had spoken; and Pasteur, whom the President "pointed out on the platform behind him as the greatest living exemplar of the truths he was so admirably enforcing," had withdrawn from my sight, all left an impression as deep as reason and as enduring as life.

The Congress now broke up into Sections, fifteen in number, which held their sessions chiefly in Burlington House and University of London; but some were provided in the Royal Institution, Albemarle Street, the Asiatic Society's meeting-rooms, Albemarle Street, and in the Royal School of Mines, Jermyn Street. By this time the number of delegates reached 2800, of which over 300 were delegates from the United States of America, and the effect of so large a gathering was especially noticeable, of course, when they were assembled and met together at general meetings. Of these the second was held in St. James' Great Hall, at which Prof. Virchow delivered an address on "The Value of Pathological Experiments," August 3rd.

At the third general meeting the address prepared by the late Prof. Maurice Raynaud, of Paris, "*Le Scepticisme en Médecine, au Temps Passé et au Temps Présent*," was read by his friend, Dr. Féréol, August 4th.

At the fourth general meeting Dr. Billings, U. S. Army, read a most admirable address upon "Our Medical Literature," August 4th.

The fifth general meeting was held on August 8th, and was remarkable for the address of Prof. Volkmann, of

Halle, "Ueber Moderne Chirurgie."

And, finally, the sixth and last general meeting, held like the others in St. James' Great Hall, was the concluding meeting of the Congress. On that occasion, being the 9th of August, Prof. Huxley made the address upon "The Connexion of the Biological Sciences with Medicine."

How well these distinguished speakers acquitted themselves, or how great was the interest which their names and works awakened, I need not here set down; but this I will say, that none before had ever felt so proud of belonging to that Congress and to his profession as after the operations of that vast body conducted in general meeting and in sections, and this feeling, excepting of course as refers to membership, will be shared by all absent professional men when the publication of the Transactions of the Congress shall have been given in print and to the world.

With regard to the employment of time, I beg to say that four objects divided attention: *First*, visits to hospitals; *second*, visits to places of interest in London, whether related to medicine or otherwise; *third*, excursions; and, *fourth*, entertainments.

The hospitals, in two groups of six each, were opened on August 4th and 5th, the medical officers and lecturers being prepared to receive such members of the Congress as desired to visit these hospitals and to inspect their schools and museums between the hours of 1.30 and 3.30 P. M., after the sections had adjourned.

Places of interest, including clubs, were reached by members, oftentimes at a sacrifice of sectional meetings, but some of them, as the Museum of the Royal College of Surgeons and the Library of the same, the Royal Botanic Society's Gardens, Regents' Park, and the Gardens of the Zoological Society, offered themselves as happy substitutes to certain members

who happened to care less about the subject discussed.

Excursions began on Friday, 5th of August, to Greenwich; 6th, to Folkestone, to Hampton Court, to the Croydon Sewage Farm and Beddington Female Orphan Asylum; Sunday, August 7th, to Margate and Boxhill; and on Monday 8th, a visit to the Docks.

Not otherwise, then, as places of highest interest, must be mentioned Westminster Abbey and St. Paul's Cathedral, in each of which a special full choral service was held on *Sunday*, August 7th, with a sermon in Westminster in the morning by the Rev. Dean Barry, D. D., and in St. Paul's, in the afternoon, by the Rev. Canon Liddon, D. D. Both of these services were most fully attended by the members, the ladies with them, and a large number of the pious and curious of London, so that the grand interiors of these noble structures displayed their vast proportions to advantage with the crowds contained, and their organs pealed forth the swelling notes of grand old anthems, lifting the voices and the songs of praise until they were lost heavenward in the arches overhead. Westminster was old and noble, but the vast proportions of St. Paul's and its perspectives nowhere crossed by rood-screen or organ, as in the former and in York Minster, carried awe and majesty to their utmost point, and left an abiding impression which the Abbey failed to produce.

It would be ungrateful in me to slight or slur over the princely hospitality extended to the members of the International Medical Congress. The welcome of words with which the delegates were greeted was repeated in deed by members of the profession; yet not by them only, but by many of the laity, whether occupying official positions or enjoying the blessings of ease and wealth apart

from the cares and burden of active public honors. There was on the 2nd of August the reception of the members of the Congress by the committees at the Royal College of Physicians.

On the next evening a *conversazione* for the members and ladies at South Kensington Museum, given by the English members of the Congress. This very brilliant affair attracted a large assembly, and was honored by the presence of the Prince of Wales and Unser Fritz, the Crown Prince of Germany.

Next came a banquet by the Lord Mayor of London, at the Mansion House.

On Friday, August 5th, a *conversazione* at the Guildhall, given to certain members of the Congress and ladies, by the Lord Mayor and corporation of the city of London.

On the 6th of August a dinner given by the United Hospitals Club to a party of the members of the Congress at the "Star and Garter," Richmond Hill.

On Monday, August 8th, a dinner given to certain members of the Congress by the worshipful master and wardens of the Society of Apothecaries in their hall in Black Friars.

Then, at a later hour, a *conversazione* given by the Royal College of Surgeons to all the members of the Congress; and here the great concourse, received by the venerable Erasmus Wilson, were entertained in the many rooms and halls of the college building, which, including the great museum, was all thrown open, and the vast collection, the portraits of ancient and existing worthies, and the portrait by Reynolds of John Hunter, and his statue sitting as in the portrait, all illuminated to invite inspection.

And finally on Tuesday, 9th of August, an informal subscription dinner at the Crystal Palace, followed the concluding meeting and ended the festivities.

But these larger entertainments, although they took precedence, were only a part of the perpetual extension of hospitality in the profession and out of it. There were breakfasts and lunches at the President's and elsewhere, daily dinners, and sumptuous ones, too, at the houses of men eminent in medicine and the schools, and receptions, with an excellent *menu*, given by English medical men, and by titled laymen, including Her Majesty's Minister for Foreign Affairs; and, finally, but not exhaustively, very charming garden parties invested hospitality with its most alluring summer dress, as at Mr. and Mrs. Spencer Wells', Golder's Hill, Homestead, and the splendid villa of the Baroness Coutts.

Yet all this mass of opportunity and work was compressed into the limits of a single week; and in London, so vast, so extended, and almost so bewildering. But the great Congress of London in 1881 has become a fact in history, it lives in memory as a wonderful thing, and in medical science it has unquestionably accomplished the greatest good yet achieved by the coöperative system of working, and is remembered for the elevated tone of its papers and discussions, for the assiduous working of its sections, and for the great practical benefits conferred upon mankind in the advancement of medicine as an art and science, both preventive and curative.

Baltimore, Nov. 17, 1881.

THE RESPONSIBILITY OF THE STATE AND OF THE INDIVIDUAL, WITH SPECIAL REFERENCE TO GITEAU AND THE DEATH PENALTY.

BY HORATIO R. BIGELOW, M. D., WASHINGTON, D. C.

"It is evident from the tone of the press, from the excitement and bitterness we see everywhere in the community, and from the very language

of one of my comrades in this discussion, that the feeling against Guiteau is one of revenge rather than a cool and dispassionate care for the safety of society. This pitiable and misbegotten wreck, who is only just within, if indeed he be within, the limits of moral responsibility, and who could not probably be proved the direct cause of the President's death, to the satisfaction of any jury assembled one year or twenty months hence,—if, carried away by hot revenge, the people hung him, it will be a blot on the justice of the American people which, probably within five years, men would do anything to erase, and which history will record as one of the most lamentable instances of temporary madness, or as evidence how much of actual barbarism lingers in the bosom of an intelligent and so-called christian community." These are the closing sentences of Mr. Wendell Phillips' paper on "The death penalty" in the North American Review, for the month of December. The salient points of argument are: 1st. Revenge as a factor in law making, or in the interpretation of law, or in the execution of a law already made. 2nd. The medico-legal aspect of responsibility with especial reference to Guiteau. 3rd. The responsibility of the state as a guardian of life, property and morality. 4th. The necessity of the death penalty. The second division may be conveniently subdivided into the following heads, for purposes of logical inquiry:

a. The relations of the individual to the state. *b.* The definition of individual responsibility. *c.* The factors of irresponsibility—*inherited tendencies—associations—physical conditions.* *d.* The psychic conditions of irresponsibility.

The consideration of the "Necessity of the Death Penalty" depends upon a just conception of the meaning of the word "society," upon a true interpretation of the Divine command

[Gen. v 6] "who sheddeth man's blood, by man shall his blood be shed; for in the image of God made he man," upon a legal knowledge of the right of the State to take life, upon a just weighing of statistics, as to its value as a preventive of crime [not as a punishment for crime—"Vengeance is mine saith the Lord"] and upon the question of ultimate sequence. That is whether the same responsibility does not obtain in a sentence of imprisonment for life, wherein the victim may die from an intensified physical cause. Evil is a necessary antithesis of good. They are co-evil, co existing factors in life. They exist only relatively and are inter-dependent expressions of morality. As abstract terms they are absolute or negative.

Individual conceptions of either or both vary with every change of country. The vice of one nation may be the virtue of another. The teachings of Mohammed of Confucius and of the Brahmin govern the spiritual lives of more peoples to day, than do those of Christianity. What is the criterion? The evidence of history, as exemplified in a purer, higher and nobler civilization. That definition of morality which has been accepted by the most enlightened thinkers, which has formed the keystone of the arch of judicious government, and which has given to the nations the fullest fruition of human hopes, which has developed individual manhood and latent possibilities and which teaches that to do good for the sake of good alone, and not merely for ultimate and eternal safety, is the only enlightened rule of life. The highest embodiment of it is found in that wondrous sermon on the Mount, and the Christian interpretation of morality, as distinguished from all other creeds that are sensual or selfish, is the generally received standard. Whether we wish to admit it or not, it is a fact, that goes without questioning that

Revenge, the love of redress, the desire to see the guilty suffer, or the personal gratification of individual bitterness, bears the same relation to the whole mental outcome that good does to evil. It is a necessary result of mental co-ordination. It is the manifestation of a will resultant upon perception and conception. Close physiological analysis will prove that the fundament of all law was found in revenge. The prevention of crime, which is the ideal of true law, was and is secondary to the fact that the guilty must be made to suffer. The law says "we do not punish this man for perpetrating a crime, but to prevent the perpetration of such crimes in the future." But the underlying spirit of the law is revenge. It is the resultant of the selfish desire of the individual and of society, to see the murderer ever suffer for his offense. The admission is an unpleasant one, and we would much rather believe that Legal Genesis was the outcome of pure philanthropy. History, however, does not sustain this phantom. Psychology cannot admit it. The first human law, ever actively in force, was that of self-protection. Necessarily as infinite beings we can form no concept that is not swayed by a limited individualism. Insensibly we are swayed by every mental faculty. To think otherwise would be to assume human infallibility.

Revenge, as a faculty common to all men, is reprehensible only when carried to illegitimate extremes. But that revenge, which is the essence of criminal law, which seeks to award punishment to the guilty, is an ever-present governing factor of society and must be recognized as such. Justice or the perfect balancing of evidence without personal bias, viewed in the light of Infinite Justice, is an imperfect assumption. The created can never equal the creator, for the power to create anything pre-supposes an infinite power of creation. To

create a sentient being pre-supposes perfect sentience. The whole is greater than any part, and human justice, as an afflatus Divine, can never free itself absolutely from its human shackels. Absolutely justice can only exist with perfect, infinite sentience. In condemning a hypothetical action of the criminal court, and regulating it to the promptings of revenge, Mr. Phillips loses sight of the fact that such a revenge, the expression of the desire of multitudes is natural and laudable. That it is made so by acclamation. That it is a ruling principle of law, and a necessary mental division in human economy. What constitutes a definition, a moral or a custom, if it be not the general approbation of society.

2. *The Medico-Legal Aspect of Responsibility.*—The State is the mere expression of an aggregation of individuals. Its laws, in a measure the outcome of heredity, are the types of individual desires, representing the ideas of the majority. In matters of social governance, as in matters physical, a certain evolution is apparent. Just as civilization advances we become purified from the fallacies and vagaries of primitive humanity. Certain pre-requisites of harmony in the administration of its internal economy are the recognized products of study and of purification. The individual is responsible to the State for his orderly conduct, and reciprocally the State is responsible to the people for the protection of life and property, and for the maintenance of a decent morality. The individual is responsible for his actions to himself, his relatives, his neighbors, to the State, until the law, framed by his peers, steps in to pronounce him irresponsible. His relations to the State are those of law and order. If he transgress either he must suffer. This is the sum of justice. There is a point of "inchoate consciousness" beyond which we dare not venture, even if

we could. But if one may strive to tread where angels falter, it may be assumed, with all reverence, that the Eternal Justice of God is pre-figured in His punishment of wickedness. There could not be Divine Mercy if there were not an antithesis. Perfect good needs neither mercy, pity or justice. Human justice, or the recognition of crime, is a type of infinite justice out of whose loins it emanates. The individual is accountable to the State, and the State to protect the individual and to prevent crime, enacts laws for the punishment of vice. The law regards any man as responsible for deeds committed with a full recognition of their enormity and consequences. Self-caused conditions of temporary irresponsibility (drinking, for instance) are not excuses for transgressions. The will "being the desire or aversion, sufficiently strong to cause action upon reflection," is the controlling factor in the mental process. This may become weakened by a transmitted viciousness of heredity, by accident, by association or by physical abuse, and such an one is not accountable for his actions. It is the duty of the State to inquire exactly into every possible detail of the case. In a consideration of Guiteau's mental condition there is very much to study. First, the acquired tendencies of the man, and the evidences of neurotic taint on his ancestry; his early life and associations; the influence of the Oneida community; the excitant upon a mind weakened by heredity and by associations, of a great political strife; the generally unhealthy and turbulent spirit of Nihilism and communism. As opposed to such inquiries, it is to be remembered that Guiteau premeditated the crime—that it was done with a full knowledge of its consequences. That he manifested fear and a desire for speedy incarceration; and last, but not least, the acumen and shrewdness of his remarks in court, have shown

him to be undoubtedly sane on some points, at least. It is neither my duty nor my pleasure to pronounce upon his condition; I only desire to show that such a question as that of sanity, in which life or death hang upon a verdict, is not to be judged hastily or ignorantly. The psychic conditions of irresponsibility are manifold and deceptive.

The ability to distinguish the right from the wrong is not conclusive evidence of sanity. Some of the most glaring cases of moral insanity have been characterized by a most perfect discrimination between the two. There is, too, and quite commonly among the insane, an acumen of ratiocination, a shrewdness of argument, and a coherency of logic, that would shame some of the brightest intellects. A fixed delusion upon one point is usually indicative of unsoundness. This may be directed against the individual himself, so that he will attempt suicide, or it may tend toward his neighbor, so that he will contemplate murder. This condition may obtain without any evidence of epilepsy or cerebral congestion. This delusion is ever present and predominant. It may not be *willed* or reasoned away. It is the controlling factor of the man's life. Constant introspection of this delusion makes it a real actor upon the stage—to the sufferer. The delusion to him is real and absolute. He withdraws from "mental freedom something which is necessary to its perfected entity, and creates abnormality in that which was to be analysed by self-consciousness." Acting under such a delusion, which he cannot control, and would not if he could, since to him, it is no delusion, the law rightly adjudges him irresponsible. Guiteau asserts that he acted under Divine Inspiration. It is the province of medico-legal jurisprudence to find out whether this be an assumed delusion or not, and in how far soever it may be a controlling

factor of his life. Mr. Phillips argues: "The theory of government, as universally held in this country, is that government is a "social compact"—"a voluntary association of individuals." Therefore, as an individual has no right to take his own life, he cannot confer on government any right to take it." This argument is inherently weak and fallacious. He also says that "the word *punishment*, capital or any other, when used in reference to human government, is a mistaken and misleading term. Punishment has a relation to guilt. Only that power, therefore, which can measure guilt is competent to affix penalty and to punish " * * * "Of course, no human official can measure the strength of the inherited tendency toward any act, criminal or any other; the power of temptation, the moral and intellectual training of the individual, or of the community and age in general, which go so far to form the moral sense of a man and educate his conscience; the circumstances, in fact, which aggravate or lessen criminality. Only omniscience knows these. Yet these make it a fact that one man may commit murder with less moral guilt, in the eye of God, than another who steals, or lies about his neighbor." It is true that punishment has a relation to crime. From the earliest days of patriarchal government, and even by Divine authority, certain punishments have always been meted out to the offender. If it be true that no man may measure another's guilt, society loses its greatest safeguard, and all crimes, great or small, must go unpunished, just as virtue, oftentimes, goes unrewarded. Of virtue we can form no just estimate but for its juxtaposition with crime. We only know reward as the opposite of punishment. It is as proper to honor the one as it is to condemn the other. Crime and punishment, reward and virtue are resultant upon the existence of good and evil in the world. The universal

tribute of praise to virtue, carries with it the universal condemnation of evil. Created in the image of the Creator, we share, in a finite and woefully limited manner, His attributes. Our justice, smeared with human weaknesses, is derived from our ideas of eternal justice. Christianity teaches that virtue shall be rewarded, and vice shall be punished. Society demands it, and statistics, Mr. Phillips to the contrary notwithstanding, show that capital punishment *is* a preventive of crime. Pure justice demands that the responsible man, convicted of murder, should himself suffer death, not as expiatory of crime, but that such crimes may be checked by such an ensample. The existence of evil necessitates graduation of punishment. We cannot imagine one term without the other. The death penalty is a logical sequence of the existence of evil, and is a social necessity.

TRANSLATED PAPER.

TUBERCULOSIS.

BY PROF. RINDFLEISCH, OF WURTZBURG.

(Translated from *Virchow's Archiv*, of July 1st, by Eugene F. Cordell, M. D.).

That tuberculosis is essentially an infectious disease, I hold as proven. Only very recently I had the opportunity to witness the most striking results of inoculation practiced by my distinguished colleague, Michel, upon the iris of rabbits. Tuberculosis can be communicated by inoculation from man to almost all the animals which have hitherto been selected for trial. How comes it, then, that so few facts can be adduced to show that the disease can also be inoculated from man to man? Tuberculous subjects are commonly regarded by pathological prosectors as harmless. How often does one receive a scratch from the ends of ossified ribs in removing tuberculous lungs, because in doing so not unfre-

quently unusual exercise of strength is required on account of the firm adhesions of the pleuræ? I believe that I have inoculated myself with tuberculosis, in this manner, already thirty times and more without experiencing ill consequences. Against this, of what value is the circumstance, that once a year a case is fished up from the entire mass of literature, where the wife of a highly consumptive person appears to have acquired the disease in nursing him? Or the statement that particles of sputa inhaled with street-dust produce consumption, if they do this only in individuals, in whose countenances tuberculosis is written even from their mothers' wombs, whilst they leave most persons unscathed. I am of the opinion that tuberculosis is undoubtedly an infectious disease, but one to which mankind has to a certain and very considerable extent accommodated itself, and whose original character is, therefore, only seen in such individuals as acquire the disease without this special accommodation.

Tuberculosis may originally have been an infectious disease of the same nature as syphilis now is; perhaps even more virulent. But it possessed, and still possesses, in a very eminent degree, the capacity of being transmitted by inheritance from parents to children. On the one hand, by inheritance the tuberculous virus became more and more diluted, on the other it became the common possession of the human race, upon whom it confers by the inheritance a certain immunity against communication from without. Among the means which are available, in maintaining this immunity, both in the individual body and in that of the human race in general, a very healthy and active assimilation and metamorphosis of tissue stand first. Good food and a plentiful formation of blood corpuscles can alone and best protect the organism

against the effects of the widespread poison. If there is a lack here, tuberculosis can again make its appearance even in individuals who were apparently perfectly healthy. Tuberculosis manifests itself then in the peculiar course which certain inflammatory processes, excited by very insignificant sources of irritation, take. And what is worse, in the cheesy products which these inflammatory processes furnish, there takes place a revival and often an abundant multiplication of the tuberculous poison. This regenerated poison is inoculable upon individuals who do not enjoy the immunity spoken of. But upon the diseased individual himself it imposes the great danger of a strong self-infection, and represents finally a new stock of poison which is transmitted to the children by inheritance. The hereditarily tuberculous are, as experience teaches, still worse adapted to contend against the fatal inheritance. Consumptives should not be permitted to marry at all, or, at most, only such consorts as by an altogether exceptional nutrition and richness of blood offer some prospect that the offspring will, with the poison, also acquire the necessary antidote. When this is not the case, and when, moreover, but little can be accomplished in the way of securing a full nutrition, the entire family often become the victims of the tuberculous poison.

And so I regard tuberculosis as an *inveterate* infectious disease. All mankind is saturated with the tuberculous poison, whose origin Darwinism might perhaps date back to the prehistoric period of the race, and most persons at least are protected against the lesser sources of exoteric infection. Against the hereditary poison, the immunity is less, because this, as we see, is rendered nugatory by bad nutrition and blood formation.

I do not believe that any of the views hitherto offered in regard to these things corresponds with the

actual observations of the physician as completely as that here expressed. Let one read the excellent observations which *Geigel* (Deutsches Archiv xxv, Hft. 1 and 3) has urged against the too hasty confounding of inoculated tuberculosis with tuberculosis, observations which every physician will subscribe to.

And is an inveterate infectious disease, as I term tuberculosis, a thing so unheard of in medicine? Have we not the example of leprosy right at hand? Leprosy was in the time of Christ an infectious disease. Still, in the middle ages, one fled at the approach of lepers and confined them in leproseries because men feared contact with them. Now leprosy is a disease, whose communication is almost exclusively limited to inheritance, against whose inoculation, however, mankind appears to have obtained by degrees a certain immunity—at least a longer residence among lepers, that is a greater quantity of leprosy poison, is necessary to render an individual, hitherto healthy, leprosy.

That the inflammatory products of lepers have something altogether peculiar, is not to be denied. *Armauer Hansen* has even lately discovered a specific lepra-cell with its inevitable bacillus, which is found only in the inflammatory tissues of lepers—the so-called tubercles. It can also not be denied that these peculiarities have been produced under the influence of inherited lepra. On the contrary, we have a full right to speak of a specific leprosy inflammation and to connect with it the altogether definite idea, that under the coöperation of an inherited amount of lepra poison in the individuals concerned, inflammatory processes, which in healthy persons would have pursued a rapid course, give rise to permanent or at least very slowly progressing infiltrates and peculiar large brown cells and bacilli.

And here I reach the main subject of this treatise. I will once more try

to give my conception of "tuberculous inflammation," by which term I understand is meant a certain histological mode of development, which the inflammatory process takes under the influence of the tuberculous poison.

Under the form of tuberculous inflammation appear:

1. The *disseminated miliary tuberculosis*, in which miliary and submiliary tubercles are found in most of the organs of the body. It is the typical form of eruption of the infectious general disease, comparable to the efflorescence of pocks in *variola*.

2. With the disseminated miliary tuberculosis is connected, by an almost inappreciable interval that form of *more localized miliary tuberculosis*, where a single organ (lungs, brain, peritoneum) is the focus of the eruption and of an inflammation accessory thereto, whilst the other organs are only comparatively little involved.

3. As *localized miliary tuberculosis* we may aptly cite the case, where miliary tubercles are found situated around a point of inflammation of an organ at distances more or less remote from it until uniting with it they eventually form the principal part of the entire infiltration. Essential tuberculous phthisis.

4. Inflammatory processes, especially ulcers, of tardy progress with an unmistakable tendency to arrest from time to time, or complete return to a healthy condition with little or no local development of miliary tubercles at all, but nearly without exception connected with tuberculosis of lymphatic glands. Chronic cheesy and scrofulous inflammations.

In my opinion we have to regard all the forms here cited in which tuberculosis appears, as inflammations in which the tuberculous virus either acts as sole excitant of inflammation (disseminated tuberculosis), or in which it assists in determining the course of a local inflammation in connection with other, especially mechanical irritants.

If we observe the rôle which miliary tubercle plays among these inflammatory processes, the impression is almost unconsciously forced upon us that we have before us in this a real specific product of tuberculosis. Where tuberculosis appears most unmixed, where it offers the first and only manifestation of the occurrence of infection with tuberculous poison, it always appears in this form. I am far from underestimating the weight of this argument and acknowledge that Virchow, by his thesis on the specificity of miliary tubercle, has made a very essential step forward in our knowledge of these things. But can I, therefore, ignore the fact that the elementary forms of development, which we find operative in the construction of miliary tubercle, also appear in the non-miliary inflammatory processes of such individuals as are subject to hereditary tuberculosis, and that thereby the characteristic stamp of tuberculous inflammation is impressed even upon these inflammatory processes? That if we trace out the prime causes which lead to the tedious course, the tendency to relapse, caseation of the infiltrate, formation of atonic ulcers, characteristic of those processes, we do not always find the miliary tubercle itself as the essential element, but those deviations from the ordinary course of an inflammatory process, which characterize also the miliary tubercle as compared with miliary abscess.

To illustrate these deviations by some of the most pregnant examples which can be given, shall be my next task.

First the assurance that I am far from intending to call all inflammations of hereditarily tuberculous individuals tuberculous inflammation in the histological sense. Acute inflammations, which depend upon a violent and continuous irritation, generally produce also in these individuals simple purulent, fibrinous and

sero-fibrinous exudations. This is so true that a good part of our therapy of tuberculous local affections depends upon it. Tuberculous ulcerations of the larynx for instance can only be cured by altering the base of the tuberculous ulcer by means of a strong irritant. One cuts into the base of the ulcer and irritates the diseased place with the view of securing for it a healthy process of suppuration and granulation.

The tuberculous inflammation on the other hand is distinguished by the fact that it rests upon entirely inappreciable irritations, which in healthy individuals, *i. e.*, those possessing immunity, would have produced at most only a passing fluxion without any permanent results.

The product of inflammation—disregarding the appearances in the vessels—is a slowly growing deposit of cells in the connective tissue of the irritated part. These cells possess originally nothing peculiar. They are colorless round-cells, such as they appear in all exudates, and which are generally held to be wandering white blood corpuscles. The peculiarities present themselves only after the exudate has remained a longer time in the place of its deposit; they can then be sought in the following particulars:

1. A part of the exudate cells assume *epithelioid* characters. I do not know who *first* described these cells; I heard them alluded to years ago by *Virchow* as *grosser* elements of tubercle, with several nuclei often arranged in pairs. The representations which *Virchow* gave of them and which are still to be found faithfully copied in my note book of his lectures, agree exactly with this description. Later, I gave them the name of tubercle-cells, because I regard them as a pretty characteristic product of tuberculosis and as the analogues of the similar cells of typhus and lepra. In normal histology these cells appear

actually only in the bone marrow. I have termed them there large celled elements of the hæmato-plastic marrow (*Schultze's Archiv.*, Bd. 17.).

They are easily distinguished from the simple colorless blood-corpuscles, partly by their size, which is three to five times as great, partly by the appearance of the protoplasm and nucleus. The protoplasm is granular, and without lustre. The nucleus or the nuclei, when more are present, appears "vesiculated" (*bläschenförmig*), as used to be said, somewhat larger than the nuclei of the white blood corpuscles, oval, pale, with nucleolus, and double nucleus border. By these peculiarities the elements under discussion approach in some measure the epithelial cells and deserve at least the title epithelioid.

The epithelioid cells appear next somewhat irregularly scattered through the new specific formation. Then they gain the mastery in certain places and directions and form continuous lines and roundish masses, and indeed even wound-up varicose strings. They are especially massed on the surface of any interval or fissure in the connective tissue. They fill the lumina of the lymph sinus in the interior of lymphatic glands, of the lymphatic vessels in the peribronchial connective tissue of the lungs. It is they, also, to whom, together with the multiplying epithelium, is due the filling up of the vesicles of the lungs in tuberculous phthisis. It would be false, however, to identify them without further evidence with growing endothelium, which view some authors seem inclined to take. They arise also in the centre of a solid tubercle nodule which in all probability was originally composed only of small round cells. They are round cells that have taken a step in the direction of epithelial cell independence. They are also cells which, like the epithelial cells, are somewhat further removed from their source of

supply than the connective tissue corpuscles. One finds them later always in associated continuities which must be nourished from without, or, as has been said, there where the territories of nutrition of the blood vessels touch each other in the interstices of the connective tissue, epithelial like, but not yet actually epithelial—that is, not as cell texture sharply separated from the connective tissue, but continually growing out of this, and with it in unbroken, gradual transition.

(To be Continued).

CLINICAL REPORTS.

A SINGULAR CASE OF HOSTILITY TO THE LOCAL USE OF ATROPIA AND DUBGISIA; THE FIRST CAUSING FACIAL ERYSIPELAS, THE SECOND TEMPORARY INSANITY IN A PATIENT 70 YEARS OF AGE.

BY JULIAN J. CHISOLM, M. D.,

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Mrs. S., aged 70, was operated upon three years since for cataract in the right eye and regained excellent sight. During the after treatment of the operation, a strong solution of atropia was daily used. When the case was dismissed the bottle of the atropia solution was retained by her and without professional advice was frequently used during an interval of 12 months under the impression that the drop was beneficial, the application giving no discomfort. After an interval of two years, Mrs. S. desired the cataract taken from the left eye also, especially as some films had recently made their appearance in the right eye and were interfering somewhat with the sharp sight which she had been enjoying. The second operation although a perfectly smooth one was followed by iritis induced by exposure, the patient going down stairs the day after the extraction and removing the bandages to aid in cooling off a red hot stove. Notwithstanding these drawbacks she could see to read with this eye. Although pupillary deposits seemed to be abundant

there was a central opening that admitted light to the retina. It was in the continued liberal use of atropia for the breaking up of adhesions in this eye that inflammation was occasioned and therefore it had to be abandoned. Some months after when all irritation seemed to have passed from the eye I desired to know what changes had been made in the pupillary deposit, and instilled a strong atropia solution in the eye for two consecutive days. On the day after the last application I was surprised to find the lids puffed and red with an erysipelatous blush extending down the cheek. I diagnosed the case facial erysipelas, but did not associate it with the atropia drop. Under large doses of the tinct. of the muriate of iron the inflammation quieted down with desquamation of the surface. Some months later she desired me to break up the filamentous web which had clouded the vision in the right eye, and forgetting the inflammatory sequel from the atropia drop I inadvertently dilated the pupil for inspection. The next day she brought me an inflamed face with the remark that she believed that it was the belladonna which brought on the attack of erysipelas as this was now the third time that her face had become swollen after I had dilated the pupil. She had again to resort to the tincture of iron for relief, and the usual desquamation followed upon subsidence of redness of swelling. Two months since I performed a needle operation through the sclerotic and forgetful of my former experience used for three days the 4 gr atropia solution. In the meantime the former inflammatory condition of the lids made its appearance and threatened a very ugly complication to the eye operated upon. The eye-ball became much injected, the media turbid, and by the fourth day some pus had made its way into the anterior chamber. The eye was really in serious danger. The patient again called my attention to the fact that belladonna which she had used so freely and so comfortably at one time, now always inflamed her face when dropped into the eye. I also had become fully aware of the connection between the eye drop and the face inflammation and therefore determined to substitute the duboisia for the atropia. I adminis-

tered large doses of tinct. iron with quinine to quell the face and eye inflammation. Fortunately by this course the desired effect was obtained and I had the satisfaction of seeing the pus disappear from the anterior chamber, the eye injection subside and the skin commence to grow pale with the usual throwing off of the epidermis. A few days after I had used once a day a 4 grain to $\frac{3}{4}$ i duboisia solution, I was followed out of the house by a friend of the lady who in a very mysterious manner told me that my patient was evidently losing her senses. Yesterday after my visit she had behaved in a most singular way, totally different from her accustomed manner. She had not only talked at random and great nonsense, but had exhibited a disposition to destroy the furniture which required her to be restrained. This peculiar excitement had come on within a half hour after my visit and had continued for several hours. Her behavior was so unusual and so very strange that he had been sent for to witness these freaks of insanity. He acknowledged that this morning he had found her quite herself again, and that all traces of yesterday's excitement had passed away. He had been discussing her condition with the patient who attributed her excitement to the quinine in the iron tincture, of which she was taking 10 grains a day. I told him at once that the quinine was quite innocent but that the mental excitement was the effect of the eye drop which I had been using for the past few days, and that he would soon see a return of her supposed insanity as I had prior to receiving his report filled both eyes with the offending solution. I begged him to watch the effects, assuring him at the same time that no permanent inquiry would occur. At my next day's visit I received from him the report that the eccentric behavior of the previous day had made its appearance a half hour after my visit at 2 p. m., and had continued till lamp light. She was noisy and showed the same unruly disposition to pull down shades, upset furniture, etc., as on the day previous. Other friends had been in the house to see this singular behavior and were impressed with the fact that the patient's mind was seriously disturbed. I assured him, that unless I renewed the drops.

there would be no return of the insanity, the truth of which he verified that afternoon.

The case is interesting as exhibiting the mental disturbance which often follows the too frequent use of a four grain solution of duboisia, even when instilled into the eye for the first time. In my desire to ensure full dilatation of the pupil in the iritic eye I had used the duboisia solution liberally. Enough had leaked into the nose through the lachrymal passages and had been either swallowed or absorbed to produce very prompt as well as persistent mental disturbance. The especial interest connected with the case however, is the local effect produced by atropia. An hostility to the local use of atropia is acquired by a long continued application and usually shows itself in a hyperæmia of the conjunctiva with painful irritation. When this condition has quieted down, particularly after intervals of several weeks or even months the remedy can be used for some time before the irritating effects will be renewed. Here was an instance in which the remedy was persistently used for months with no local irritation whatever, when it began to show very pernicious local action not so much in the form of conjunctival injections but as erythema or even erysipelas of the face, involving the lids and quite an area of cheek, and terminating by the usual form of desquamation. Then comes the very peculiar and evidently recently acquired effect, following upon one single day's use of the remedy, showing itself in the skin of the lids even before the conjunctiva becomes injected, and assuming all the appearances of true erysipelas. What condition could the system of this patient have undergone in the past two years which at one time would allow the liberal use of atropia for weeks and even months at a time with only pleasant effects and now will not tolerate one single day's use without the most positive resentment. Since appreciating the singular phenomena induced by the local use of atropia in the case of Mrs. S. I have tested its irritability with her and have brought on the circumscribed injection with swelling of the lids and surrounding cheek by one single instillation of a one per cent solution of the sulphate of atropia.

EDITORIAL.

THE YEAR 1881.—The present number is the last issue of this JOURNAL for the year 1881. It may be of interest to take a retrospective view of the year soon to be numbered with the past.

The year 1881 will take its place in history as a memorable epoch in the annals of medicine. Whilst the year has contributed no startling discovery in science, no great revolution in medical thought, it will be noted for the marked activity of the professional mind, for zeal and labor in scientific study and original research. The year began with no noted event. In due time came the college commencements, with long lists of graduates, making large accessions to the professional ranks. Next follows the meeting of the American Medical Association in Richmond, an event only noticeable as an annual gathering of a large number of medical men from all sections of the country.

The State medical societies and the associations of specialists have convened and adjourned without any special work of historic value. Their contributions have been noted for general interest and average excellence. Upon the whole these meetings have advanced in value and influence in their special localities and special work.

We have next to record the foul assassination of the Chief Executive of our Government, the long contest between science and death over the life of this patient sufferer, the final result, which made this nation mourn, which attested the skill of the surgical art, the power and at the same time the inadequacy of science in its mastery over human life. No event in the history of the ages is comparable to the record of the surgical treatment of the late President. His exalted station, his foul murder and lingering illness have made memorable the scientific bearing of his case. History does not record an instance where a single human being was the recipient of the same tender interest and care, of loving solicitude and watching. The President, as a man, in no respect differed from the average human being, but as the head of the nation he became the nation's patient, and it is believed that

all that science or humanity could do was done for this distinguished individual.

Time and the advanced knowledge of our science may point out the errors of practice, if such were made, but it may be claimed with fairness that the treatment was judicious, skillful and in accord with the best rules of practice as they existed at the time of their enforcement. Criticism as to the management of this case has been for the most part hasty and intemperate, animated by personal prejudice or jealousy upon the one side or by vain egotism and love for notoriety upon the other. The case is fairly open for study and judicious investigation. It is to be hoped, in the interest of right and justice, that those who seek to condemn or point out the errors of practice will do so in the spirit and method of true science.

The next great event worthy of consideration was the meeting of the great International Medical Congress, in London, during the month of August. So large a body of distinguished representatives has never before assembled in the history of medicine. The great men in medicine and in many of the collateral sciences, from all the great governments of the world, met upon common ground and brought tributes of scientific offerings, the experiences of earnest labor and toil in the human cause. The proceedings of this Congress have been made known, as yet, in part, but when this great work is presented in whole it will be seen how great has been the labor and the contribution of this body.

Standing out prominently among other valuable contributions to the Medical Congress is the labor of one man, M. Pasteur, whose original researches into the ætiology and prevention of disease in lower animals are destined to work out greater triumphs in our science. The progress of the germ theory, so ably advocated by Pasteur, Lister and others, may well awaken the belief that we are now on the border land of real and valuable insight into the causation of many preventable diseases.

If the theories advanced by Tommassi-Crudeli and Klebs, by Wood and Formad, and other original investigators, become actual truths this century will

have witnessed no greater triumphs than the investigations of the year 1881.

We may speak with much pride of the labors of the National Board of Health in this country. The substantial efforts it is making in the promotion of the public health is a subject for congratulation.

The hygienic interests throughout this country have continued to develop during the year. Wise legislation, the proper use of money and zealous efforts upon the part of health boards in States and municipalities have largely advanced the cause of preventive medicine.

The usual, if not increased, activity has been manifested in book-making. But few original works of decided merit have appeared during the year, but revised editions of well-known books have, in numerous instances, been made valuable by the addition of the most recent practice. Monographs upon various subjects mark the zeal and labor of the professional mind in investigation and study.

More than the usual number of new medical journals and medical colleges have been brought into existence, as substitutes often of defunct and abandoned enterprises.

The question of higher medical education has absorbed considerable attention during the year, and some progress has been made in extending the course of study and in requiring a higher standard of acquirement. It is to be regretted, however, that greater impetus has not been given to this needed reform. It does not seem practicable for a single institution to take this advanced step, and the profession cannot hope to see great improvement until a general advance is made by all of the more prominent schools now competing for students.

The close of the year is conspicuous for a criminal trial, which presents many questions of medico-legal interest. Professional opinion, as expressed through medical periodicals, has been hasty in pronouncing upon the responsibility of Guiteau. The theory of insanity is well sustained by some high authorities and denied by others equally eminent in this branch of study. The profession may well look with interest to the results of the trial, as the question of mental responsibility is one of most clever dodges behind which a base moral act can take

refuge. We desire to see such a verdict in this case as cannot in future reflect upon the judgment of medico-legal science, and hence we cannot but regret the irregular and farcical manner in which the trial is being conducted. It does not appear at this time of writing that the best methods of ascertaining the mental soundness of the criminal have been employed by the prosecution; and we are forced to confess that a fair judgment as to the responsibility of the criminal's act cannot be reached at present. We defer our judgment until less passionate and more judicial and systematic investigations have been made by men skilled in recognizing the various phases of moral and mental criminality. Call Guiteau by what name you please, his mental eccentricities are of a most exaggerated form, and charity would suggest that reason at least has lost her balance if not altogether dethroned.

As we look back over the year we may well review its progress in all that contributes to the good of our race, to the elevation and advancement of knowledge and skill in every department of learning. It is a source for pride that medicine has not been wanting in its offerings but has helped to swell the flood of good which makes our civilization a blessing.

ANNUAL REPORT OF THE NATIONAL BOARD OF HEALTH.—The third annual report of this important body, for the year ending June 30th, 1881, is given in the National Board of Health Bulletin of November 19th, 1881, and is an interesting document. It indicates the continued usefulness of the Board and shows that the sanitary interests entrusted to its hands have not been neglected. It is well known that the Board has undertaken various scientific investigations as a part of its work and as an appropriate exercise of its functions; we have here a list of such investigations during the period embraced in the report. Some of these have been completed, others are still in progress. The former include the remarkable studies of Drs. Wood and Formad, of Philadelphia, on the etiology and nature of diphtheria, which apparently afford "positive demonstration of the fact that a fungoid organism found

in healthy and in inflamed, but non-diphtheritic throats, may yet under certain unknown conditions, assume an active state, as shown by an unlimited power of generation in culture experiments, which is not exhibited to anything like the same extent by the innocuous form of this organism, and in this active state will give rise by inoculation to all the phenomena of malignant diphtheria;" the investigations of Dr. Sternberg, upon the etiology of malarial fever, showing the insufficiency of the evidence upon which Klebs and Tommassi Crudeli have based their claim to the discovery of the specific cause of malaria; the investigations of Prof. Remsen, of this city, upon the alleged danger of carbonic oxide in apartments heated by cast-iron stoves or furnaces, proving that there is not present in the immediate vicinity of the flues as much as 0.04 per cent. of carbonic oxide, an amount so minute as probably to be incapable of doing harm, and a Report on the Sewerage of Europe, by Rudolph Hering. Of investigations partially completed are those upon the relations of the different soils to the air and water currents passing through them, by Prof. George A. Smyth; those of Profs. Mallet and Martin, on the best method of determining the amount of organic matter in potable water, and the specific effects of variously contaminated water on the health of persons who have used it; that by Mr. E. W. Bowditch, sanitary engineer of Boston, on the sanitary condition of summer resorts; that of Prof. Wood, of Harvard College, on the conditions of arsenical poisoning by means of emanations from wall-papers, carpets, and other furniture; and lastly that of Dr. Stephen Smith into the history of quarantine in this country. These details show the wide scope of work which this energetic Board, composed of some of the most distinguished sanitarians and eminent physicians of our country, has assigned to itself, and had we no other fruits of its official labor than these, they alone would have justified the legislation by which it was appointed. But this is only a small part of the work undertaken and accomplished, which embraces also the measures carried out in connection with maritime and inter-State quarantine,

sanitary inspections at New Orleans, the prevention of the introduction of small-pox into the United States, and the International Sanitary Conference at Washington, together with the exacting routine duties imposed. The statement of expenditures for the year contains the following items of interest: Total amount expended since the organization of the Board, April 1, 1879, \$440,000; expended during the year, \$165,000; special scientific investigations, \$10,176; pay and expenses of members of the Board, \$8,845; printing Bulletin of National Board of Health, \$8,202. The entire amount expended during the year was over \$100,000 less than during the preceding year, which is owing to the fact that a considerable part of the appropriation made was conditional upon the occurrence of an epidemic during the year. The amount appropriated by Congress for the present fiscal year is only about one-third that asked for and deemed by the Board necessary for the efficient maintenance of quarantine.

THE VIVISECTION PROSECUTION IN ENGLAND.—The recent attempt of the anti-vivisection party in England to prosecute Dr. Ferrier for experiments upon animals, illustrates the end to which stupid zealots may carry their prejudices and ignorance in matters about which they are totally misinformed and the reasons for which they are unable to comprehend. Those people who hold themselves better than the rest of human creatures are only capable of taking the narrowest view of scientific questions, and of measuring a public benefit by the limited view of their own horizon.

It seems that the ground for the prosecution was based upon the fact that certain monkeys, which were experimented upon, were not totally killed, but had been kept alive for further experiment and study. Dr. Ferrier was summoned to appear before a court of justice to answer for violation of the anti-vivisection act. He appeared to answer the charge, but through some irregularity in summoning the wrong person the case was dismissed and Dr. Ferrier let free. It is stated that Dr. Ferrier was prepared to vindicate his course and to show the value of his experimentation. He was

not needlessly torturing animals, as his persecutors would have it appear, but was working with a clear and distinct purpose in view. Those who are familiar with the good work Ferrier has done and with his valuable contributions to science, cannot but rejoice in his complete triumph over his enemies and obstructionists.

OPHTHALMOLOGICAL AND OBSTETRICAL SECTIONS OF THE MEDICAL AND CHIRURGICAL FACULTY.—We desire to call the attention of members of the Faculty to the fact that these sections are now regularly organized, and are holding monthly meetings, the former on the first Wednesday, the latter on the fourth Friday in each month. It is important that it should be understood at once that those having charge of them have no intention or desire to compete with—much less supplant—the local societies; for they know full well how vitally the interests and welfare of the Faculty are dependent upon the prosperity of the latter. Their aim is simply to provide a means of bringing together occasionally—from all the societies as well as the profession at large—those who are particularly interested in one of the two great specialties, ophthalmology and gynecology, to allow of fuller and freer discussions than could otherwise be secured, and to obtain all the benefits that can accrue from the concentration of those working and thinking in the same lines. It is to be hoped that the efforts now being made to vitalize the sections of the Faculty may not, like former ones, fail for want of appreciation and support.

REVIEWS & BOOK NOTICES.

A Manual of the Practice of Medicine Designed for the Use of Students and the General Practitioner. By HENRY C. MOIR. Steam Press of the Industrial School, H. O. A., 1881. Pp. 445.

This book, of an elementary character, aims to present a great number of useful facts in a small compass, and so arranged for handy reference wherein the reader's memory may be

refreshed in the pathology, etiology, symptomatology, diagnosis and treatment of the more important diseases. The author does not pretend to offer anything original or novel, but attempts to present well-known facts in systematic arrangement and stripped of all unnecessary verbiage. Considering the size of the book, he has succeeded in getting in good shape a large amount of useful matter compiled in such order as to present a careful epitome of each subject treated. An effort has been made to impress the reader that no diagnosis should ever be final without a careful study of each individual symptom, and that to be accurate and rapid in diagnosis, the causes of each and every prominent symptom of disease should be particularly memorized and constantly reviewed. "To be a skillful diagnostician," remarks the author, "one should first know every disease which can affect any tissue or organ; he should, furthermore, have at his command the causes in full of each and every prominent symptom which the patient may present."

Due attention has been given to the treatment of diseases, and as an additional aid to the reader, a number of reliable and valuable prescriptions, from well-known teachers and practitioners, have been appended at the end of the book, arranged in alphabetical order so as to enable the reader to turn at once to the disease for which he seeks a recipe. As a condensed resumé of many important diseases, the work will have its value to the busy practitioner and medical student.

Indigestion, Biliousness and Gout in its Protean Aspects. Part I. Indigestion and Biliousness. By J. MILNER FOTHERGILL, M. D. William Wood & Co., New York, 1881. 8vo. Pp. 320.

"Physiology alone can guide us to a knowledge of function," explains

the plan of this book. We have first normal digestion, then indigestion, in the alimentary canal and liver, successively. We see Fothergill here at his best; no dull pages to nod over, but everywhere crisp and sparkling with gems of thought and shrewd observation. He draws largely from Roberts, Murchison and Foster, but surely it can be no disadvantage to any work to be based upon such solid foundations as these. One of the most interesting and striking parts of the book is that relating to the *liver*, and which occupies nearly the last half of it. We scarcely yet have begun to shake off that feeling of scepticism, which relegated the largest gland in the body to the limbo of impenetrable mysteries. Empirical experience went for nothing with the iconoclasts of medical progress. But now we have in these pages of one of the leading authorities of the day the teachings of our forefathers brought back to us and impressed with all the force derived from scientific proof. "Biliousness," in the light of modern experimentation, becomes a reality, and the liver exchanges its ethereal unsubstantiality for a chief rôle in the drama of existence. Galen was not so far wrong after all, and observant Abernethy would not need, were he alive, to feel ashamed of some of his teachings at least. Let us hope that with the restoration of our lost inheritance we may not also fall heir to that tendency to the excessive use of cholagogues, which tarnishes the memories of the past age. Is the reader familiar with the new views of hepatology? If not he cannot afford to be ignorant, and nowhere will he gain the knowledge more quickly, agreeably and satisfactorily than in the pages of this popular author.

Eczema and its Management. By L. DUNCAN BULKLEY, A. M., M. D., New York, 1881. Pp. 334.

The Science and Art of Midwifery.

By WM. T. LUSK, A. M., M. D.,
New York. D. Appleton & Co.,
New York City, 1882. Pp. 663.
Cloth, \$5.00; Leather, \$6.00.

Text-Book of Modern Midwifery. By

RODNEY GLISAN, M. D. Presley
Blakiston, 1012 Walnut St., Phila-
delphia, 1881. Pp. 634. Cloth,
\$4.00; Sheep, \$5.00.

The Diagnosis and Treatment of Dis-

eases of the Eye. By HENRY W.
WILLIAMS, A. M., M. D., Boston,
Mass. Houghton, Mifflin & Co.,
Cambridge, Mass. Pp. 454. Cloth,
\$4.00.

Lectures on Electricity in its Relation

to Medicine and Surgery. By A. D.
ROCKWELL, A. M., M. D. Wm.
Wood & Co., New York, 1881.
Pp. 120.

Suppression of Urine: Clinical Des-

criptions and Analysis of Symptoms.
By E. P. FOWLER, M. D. Wm.
Wood & Co., 1881. Pp. 83.

The Student's Manual of Venereal Dis-

eases, Being a Concise Description of
the Affections and of Their Treatment.
By BERKELEY HILL and ARTHUR
COOPER. Second Edition. Wm.
Wood & Co., New York City.
Price 10 Cents.

The Physician's Clinical Record for

Hospital and Private Practice, with
Memoranda for Examining Patients,
Temperature, Charts, etc. D. G.
Brinton, Philadelphia, 1881.

Medical Record Visiting List for 1882.

Wm. Wood & Co., New York.

THE influence of school-life in pro-
ducing myopia is shown by the fig-
ures of Zehender, who found only
10.9 per cent. of myopes in the sixth
class, whilst in the first class they had
risen to 41.38 per cent.—*Rostock Gaz.*

MISCELLANY.

CHOREA IN THE AGED.—*Dr. Whar-*
ton Sinkler believes this disease is not
so rare in the old as is commonly sup-
posed. It is often mistaken for senile
trembling or paralysis agitans. He
relates two striking examples in a
male and female, aged 86 and 82 res-
pectively. One recovered in a few
months, the other remained the same
after 2½ years. There was no de-
mentia in either case. Organic heart
disease was present in both. The
disease resembles that of childhood,
but the movements are less violent
and varied. Senile trembling is gen-
erally confined to the head and is a
continuous tremor; in paralysis agitans
the tremor is slight at first and under
control, generally increasing in extent
and violence, with loss of power in
the parts. The tremor of sclerosis
occurs during voluntary effort and is
connected with loss of muscular
power.—*Journ. Nerv. and Ment. Dis.,*
July.

INCISION OF MEMBRANA TYMPANI.—

In accumulations of mucus or pus in
the cavity, paracentesis *carefully and*
gently performed is a great addition to
our means of cure. It is not, how-
ever, to be lightly undertaken; mucus
may be removed, with a little delay
by the Politzer bag, and a red and
swollen drum-head may be relieved
by leeches or scarification. In per-
forming paracentesis the author uses
a small needle and makes the incision
just large enough to give exit to the
pus, blood or mucus.—*St. John Roosa,*
Archives of Otology, Sept.

NERVOUSNESS RESULTING FROM IN-

TEMPERANCE.—We have found *Cele-*
rina exceedingly valuable in the treat-
ment of nervous headache, nervous
exhaustion, and other associated ail-
ments of women; but the cases to
which we now desire to call attention,
where the *Celerina* is of inestimable

value are those suffering from nervousness resulting from intemperance. Every practitioner of medicine meets with such cases. Men, and sometimes women, come to us trembling and apparently exhausted, all from the effects of intemperance. Such cases are approaching delirium tremens. Celerina is the most appropriate prescription we can give them. A few doses of bromide of potassium may be given, alternated with the Celerina, at first; but after this, for permanent effects, we depend upon the Celerina.—*American Med. Journal.*

TABLE OF 110 CONSECUTIVE CASES OF ABDOMINAL SECTION PERFORMED DURING YEAR ENDING NOV. 1, 1881:

	Cases.	Deaths.
Exploratory Incisions (all malignant disease), . . .	14	0
Removal of one Ovary for Cystoma, . . .	38	2
Removal of both Ovaries for Cystoma, . . .	9	0
Removal of Parovarian Cysts, . . .	4	0
Removal of both Ovaries and Tubes for Myoma, . . .	11	1
“ “ Hydrosalpinx, . . .	5	0
“ “ Pyosalpinx, . . .	3	0
“ “ Chron.Ovaritis, . . .	2	1
Opening and Draining of Pelvic Abscess, . . .	11	0
Hepatotomy, . . .	4	0
Enterotomy for Intestinal Obstruction, . . .	2	0
Hysterotomy, . . .	4	2
Cæsarian Section, . . .	1	1
Extra-Peritoneal Cysts—Peritoneum not Open'd . . .	2	2
	110	9

—*Lawson Tait, Med. Times and Gaz.*

ANNUAL MEETING OF BALTIMORE MEDICAL ASSOCIATION.—The sixteenth anniversary of the founding of this society, the oldest of the local medical organizations of this city, will be held on Monday, January 9th, 1882. At this meeting the officers for the ensuing year will be elected, and there will

be the customary annual supper. Tickets to the latter, \$2.50 each, can be procured of members of the executive committee, Drs. Chas. H. Jones, John Morris and John R. Uhler. Each member has the privilege of procuring an extra ticket for a friend upon the same terms. The committee hope to receive a very large number of subscriptions to the supper, and will leave nothing undone to render the occasion in every way a success. Attention is called to the time of holding the next meeting, which, in order to avoid the legal Christmas holiday, has been postponed until Tuesday, December, 27th. At this meeting officers will be *nominated*.

CASE OF FICTITIOUS HIGH TEMPERATURE.—*Dr. Stephen Mackenzie* reports a case in a *neurotic* woman, æt. 42, in whom the temperature rose to 120. The patient subsequently acknowledged that she had caused the high temperature by poultices, hot bottles, &c., which she used with sufficient cleverness to elude the vigilance of her attendants.—*Med. Times and Gazette, Nov. 5.*

RUPTURE OF UTERUS SUCCESSFULLY TREATED BY DRAINAGE.—Two cases are reported in a recent number of the *Centralblatt für Chirurgie*, one in a patient æt. 35, in her 5th labor, the other in a patient in her 13th labor. In both a foot was seized and the child extracted (from the abdominal cavity) *per vias naturales*, in one case it being necessary to enlarge the rent by small incisions with scissors. The placentæ were next extracted. In one only carbolic acid injections were used. The tubes were removed on the 4th and 30th days respectively. There was slight pyrexia in both some days after the accident. Frommel reports in *Zeitschrift für Geburtshilfe und Gynakologie*, 8 cases, 7 of which were treated by laparotomy, all fatal—1 by drainage with recovery. Dr. Græfe remarks there can be no doubt of the

advantage of simple drainage over laparotomy in country practice, where the necessary assistants, instruments, &c., for laparotomy often cannot be had in time to be of service.—*Med. Times and Gazette*, Oct. 22.

EWALD, LECTURES ON DIGESTION, sums up the results of Pasteur's experiments establishing the irrefragible proof of panspermism as follows: 1. There are at all times in the atmospheric air germs present which are necessary to the development of vibrios and bacteria, but the quantity varies with the locality. In pure land air and on the tops of mountains they are present, as Cohn, Burdon-Sanderson and Rindfleisch ascertained in smaller quantities than in the impure air of towns. 2. The nutritive fluids do not, by the manipulation which destroys the contained germs, lose the capacity to take up new germs, and to bear and nourish vibrios, when unheated air is admitted to them. 3. The germs contained in the air or the vibrios themselves are destroyed by the prolonged action of red heat, so that in suitable fluids they are no longer capable of development, whilst they stand temperatures of 120 to 130 C. without damage.

SOCIETY BULLETIN.—*Medical Association* will meet Tuesday, December 27th, at 8 P. M. Dr. Ellis will open the discussion, and officers for the ensuing year will be nominated. *Medical and Surgical Society* meets every Wednesday at 8.30 P. M. *Clinical Society of Maryland* will meet Friday, December 16th, at 8 P. M. Dr. Coskery will read a paper on "Trephining," and Dr. Latimer will open the discussion on "Croup." *Academy of Medicine* will meet Tuesday, December 20th, at 8.30 P. M. *Obstetrical and Gynecological Section, Med. and Chi. Faculty* will meet Friday, December 23rd, at 8.15 P. M. *Ophthal. and Otolog. Sect., Med. and Chi. Fac.*, will meet Wednesday, Jan. 4th, at 8 P. M.

MEDICAL ITEMS.

LOOMIS keeps his patients under the full influence of opium during the entire 1st stage of pneumonia, thus diminishing or preventing the effect of the poison on the nervous system. The usual antipyretics may be used at the same time, as also alcohol if needed.—Well authenticated cases are on record (*Neale's Digest*) of recovery after immersion under water for $\frac{1}{2}$, $1\frac{1}{2}$ and even 2 hours.—Da Costa considers ergotine the best remedy for the night-sweats of phthisis—two grs. three or four times a day. It is less prompt than atropia, but it is free from any unpleasant effects which the other is not.—MacDonald (*Ed. Med. Journ.*) finds carbolic acid, m. $\frac{1}{4}$ to i, to relieve the whoop, check the vomiting, and diminish the intensity and frequency of the paroxysms of whooping cough in children.—12 women have so far completed the course of medical study in Paris, and 42 are now studying there, viz: 18 English, 11 French, 10 Russian, and 3 American.—*Ry.* Ext. ergotæ liq. m. xxx, mag. sulph. \mathfrak{z} ss, acidi sulph. dil. m. xv, aquæ ad \mathfrak{z} i—every 2 hrs. till the bleeding stops. For hæmoptysis.—*Saundby, Practitioner.*—*Ry.* Acidi sulph. dil tinct. aurantii, āā \mathfrak{z} ii, sacch. albi. q. s., aq. fontanæ, oj—recommended by Saundby, in *Practitioner*, for the diarrhœa of phthisis; to be drunk *ad lib.* every half hour till it ceases.—M. Wölfler, Billroth's assistant, reports that the patient whose pylorus he extirpated some six months ago for cancer, continues perfectly well. Mr. Spencer Wells has also, so far, had good fortune with his patient, whose cancerous pregnant uterus he extirpated by abdominal section Oct. 21st.—Lawson Tait maintains that the function of menstruation is seated in the Fallopian tubes and that ovulation and menstruation are wholly independent of each other.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

IN WHAT CASES AND WHEN IS THE APPLICATION OF THE TREPHINE JUSTIFI- FIABLE OR ADVI- SABLE?

BY OSCAR J. COSKERY, M. D.,

Professor of Surgery, College of Physicians and Surgeons.

(A paper read before the Clinical Society of Maryland, Dec. 16th, 1881).

Perhaps few subjects in surgery are still more unsettled than this: In what cases and when is the application of the trephine justifiable or advisable? In stating these simple questions I know that I have opened up a subject, the consideration of which might lead to endless discussion; still, my aim will be to confine myself to only one, and the commonest condition, perhaps, in which the operation is looked upon with favor, the intention being also to call attention to the diversity of sentiments even in these cases.

I have trephined the skull three times.

The first case was that of a boy of about 16 years, who, kicked by a mule, had a portion of the frontal bone depressed over a space one and a half inches in diameter. A quantity of brain-matter had escaped through the wound in the scalp, and hemorrhage was free. On raising the depressed bone, after the button had been extracted, the bleeding ceased at once, the general condition, as indicated by the pulse and temperature, improved, but the boy never recovered consciousness and died a few hours afterwards.

The second case was moribund when brought in, and, although no good was expected to come of it, the trephine was used and pressure relieved, the patient, as anticipated, dying soon after.

The history of the third case is as follows: A male of weak intellect since receiving a blow upon his head some years before, attempted suicide by shooting in Druid Hill Park (this city), during the early part of August, 1881. The pistol was held in the right hand, the muzzle pressed against the hat (a soft felt), in the immediate

neighborhood of the left fissure of Rolando, and the trigger pulled with the right thumb. The crown of the hat was torn in many directions, seemingly by the explosion. The scalp was found wounded, and between it and the skull the bullet was discovered, flattened, and through the wound was easily extracted. Under the scalp wound was found a linear fracture of the skull, running backwards and downwards. Parietic symptoms, in the right arm and leg, had come on immediately upon the reception of the injury. Intellectual activity did not seem to be much affected. The partial paralysis continuing, trephining was done the day after the accident and two pieces of bone, each about $\frac{1}{4}$ by $\frac{1}{2}$ inch in size and consisting of the inner table, almost entirely, were found detached and lying upon the dura mater. Their removal did not relieve the paresis, however, and the patient died one week after, of what the gentleman who had charge of him described as meningitis.

The result in these cases is in unhappy contrast with one I saw in 1864 in the U.S. Army, where a patient received a minnie bullet over the longitudinal sinus, and in whom symptoms of compression rapidly came on. Trephining, elevating the depressed portion of bone, and letting out of blood clot, although followed by extensive sloughing and some constitutional disturbance, terminated, at last, in complete recovery.

In connection with the above I relate the following, in which no effort to raise the bone was attempted: In July of this year a young colored woman was struck a savage blow, with a brick, upon the head near the posterior-superior angle of the right parietal bone. Twenty minutes after the reception of the injury I found a wound of the scalp one and a half inches long, which led down to a fracture of the skull, into which the finger-nail could be insinuated. She

was having repeated tetanoid convulsions, for which chloroform and hypodermic injections of morphia were given. After the seventeenth convulsion she recovered and was taken home. During these convulsions I advised trephining, and it was not done simply because of certain slight difficulties at the time. From the time of her return home she did not have a headache, was up next day, and in less than three months afterwards was again before the class suffering from the same character of wound over the left fronto-parietal region, again had repeated convulsions (this time nine (9) in number) and again recovered completely.

A few years ago I related before this society the particulars of the three following cases: First.—That of a colored man who presented himself at the clinic with a wound of the left side of the skull in the immediate neighborhood of the fissure of Rolando, one inch long by half an inch wide, through which wound the brain could be seen as a granulating, suppurating surface fully three-quarters of an inch below the general surface, and with, at first, complete paralysis of the right arm. As the brain substance approached the surface, and the external wound closed, the paralytic symptoms passed away, and the patient got perfectly well.

Second.—A white man, 45 years of age, caught under a falling wall, received a wound of the fronto-parietal region. Through the cut scalp could be seen a triangular piece of the skull, half an inch long, bent downwards upon the exposed dura mater. Not being able to raise the depressed portion with the common elevator of the pocket case, and no ugly symptoms being present, the scalp was loosely brought together and the patient put to bed, the intention being to trephine as soon as symptoms of cerebral irritation should make their appearance. The patient never had a bad symptom

and left hospital within two weeks of his entrance.

The third was that of a man cut with a hatchet. The wound involved the left frontal bone, and brain matter oozed out for two days. No headache or pain of any kind came on, the wound healed well (the cicatrix pulsating for nearly two months), and the man entirely recovered.

I have now under observation two cases. The first is that of a young man, who, when about 12 years of age, was kicked by a mule. Great depression of the frontal bone was produced, which now, fifteen years afterwards, is still so deep and broad as to nearly admit the index finger. Beyond a temporary unconsciousness at the time, and the deformity, still present, the patient has never had any discomfort.

The other patient met with a similar accident, and now, fifteen years after, presents a like deformity in greater degree. This patient was unconscious 24 hours. At the last meeting of the Med. and Chirurg. Faculty, I showed a sailor, whose left frontal bone was depressed nearly half an inch below the right. Except the temporary shock, no bad symptoms were seen.

In another case of punctured wound of the skull, produced by a nail, and not trephined, no cerebral symptoms ever made their appearance, but the patient died of chronic pyæmia months after.

The important question presented for discussion by these cases is, in which of them was trephining applicable? But before alluding to them particularly I will read the opinions of the authors of our present standard text-books in reference to the advisability of trephining in general.

Mr. Erichsen, while admitting that surgeons vary much in their opinions about trephining, says (p. 547, vol. 1): "As far as my own experience is concerned, which is necessarily drawn

purely from civil practice, I can say that, with the exception of the case that has just been referred to (on p. 547), I do not recollect ever having seen a case recorded in which a compound depressed fracture of the skull occurring in the adult had been left without operation."

Mr. Prescott Hewitt (Holmes' Sys. Surg., Am. Ed., vol. 1, pp. 621 and 622) is also rather positive as to simple but especially compound fracture.

Mr. Bryant, "Practice of Surg.," Am. Ed., p. 184, uses the following language: "In cases of *depressed fracture*, ought the bone to be elevated? And should the fact of the fracture being compound influence the decision? I have no hesitation in answering both questions, and asserting that in neither instance ought surgical interference to be thought of unless the symptoms of compression are marked or persistent; for experience has taught us that depressed bone *per se* may exist to any serious brain complications, and that, when even brain symptoms follow as an immediate result of the injury, they may pass away." But lower down he says: "In all cases of *punctured fracture* of the skull trephining should be resorted to"—and the American editor has added to this the words "without delay."

Druitt, page 329, Am. Ed., advises waiting in simple depressed fractures without symptoms of compression, or if these symptoms are present in slight degree. Even in compound fractures he suggests that the trephine be not used except there are urgent symptoms.

Ashurst, "Principles and Practice of Surg.," says, p. —: "It will thus be seen that I would restrict the use of the trephine within very narrow limits; it is not to be used with the idea of *relieving compression*" (the italics are mine), "nor with the idea that there is any special virtue in the operation to prevent encephalitis."

While Agnew, vol. 1, p. 305, advises the operation in all depressed fractures with symptoms of compression, and in some where the latter does not exist, and, it seems to me, argues from the general standpoint that the value of the operation depends primarily upon the amount of compression relieved. In this idea he only echoes the sentiments of all, so far as my reading goes, except the author (Ashurst) quoted above.

While I do not think that we can be very dogmatic upon a subject about which there seems such diversity of thought, it seems to me quite possible to formulate some rule of conduct in these cases; and, for myself, I have decided on the following: Never where symptoms of compression are wanting, to interfere. In those cases in which the symptoms of compression short of coma are present, to *wait*; but where coma is present and increasing to trephine at once.

It may now be asked—what do the cases stated in the body of my paper go to prove, so far as the advisability of the application of the trephine is concerned? I regret to say very little. Perhaps you, and I, and others will go on trephining to the end of time; still from these cases we certainly glean this: That if we had followed some of the authors quoted we would have trephined those who certainly did not require it, as shown by the results, while in others we would have withheld our hand.

BOLLINGER communicated tuberculosis to pigs by feeding them on the milk of tuberculous cows. He therefore recommends that the milk be boiled before use. Goat's milk is safer, this animal rarely having the disease.

A MEMORANDUM ON VACCINATION, INOCULATION AND SMALL-POX.

BY RICHARD MC'SHERRY, M. D.,

Professor of Principles and Practice of Medicine, University of Maryland.

(Read before the Baltimore Academy of Medicine, Dec. 20, 1881).

There is a strong prejudice current in many minds against vaccination which is not altogether confined to the unintelligent classes. It is an unreasonable prejudice, and yet not altogether unfounded. Alarming and dangerous accidents have followed vaccination when a vitiated virus was used, and in some instances the disease conveyed by such matter was worse than the small pox itself. The promulgation of such a fact would necessarily cause people to fear a process upon their own persons, or upon their children so capable of doing them serious injury.

It is true such accidents have very rarely happened, not once, perhaps, in a thousand persons, yet as they have happened, why not occur again, and why not in the one subject cognizant of them and dreading them?

The physician can only respond to such apprehension that the dreaded accidents can always be averted by sufficient care in the selection of the virus, and in the method of application.

In my practice I never saw, but once, alarming symptoms follow in the numerous or rather innumerable vaccinations performed in a long series of years. The exceptional case was in a season of small-pox panic, and the allegation ran that many persons had been poisoned by bad virus. I was using at the time a scab in which I had perfect confidence, and with a portion of it I vaccinated a gentleman in active business, who had been pretty well charged with brandy, though never drunk for many years. In the course of a week his whole arm was immensely

swollen, and then dark discolorations appeared so that I apprehended gangrenous erysipelas. It did not occur, however, and in due time, though slowly, he recovered. I vaccinated his wife at the same time with the same matter. She took it regularly and rightly, and had no trouble whatever. But for this circumstance, my patient, though a personal friend, and his wife, and probably others would have attributed all the unfavorable symptoms to the quality of the virus, which, however, was perfectly good, the fault being in the condition of the subject and not in the condition of the matter.

Nothing does good but what may also do harm, says a Latin poet—"Nil prodest, quod non ledere possit idem" (Ovid), which is a truism usually, but vaccination seems quite harmless with the exceptions granted.

With good virus and a good subject there is nothing to fear. But humanized virus may be contaminated with a modicum of syphilitic or other vitiated blood; and even bovine virus may carry with it matter for tuberculous infection. A medical friend recently showed me ivory points charged with virus, and also stained with blood. For obvious reasons such points or quills are objectionable. The experiments upon tuberculous inoculation quite suffice to show the danger of passing blood which might transmit infection either from its original source or from changes undergone from subsequent exposure.

As it would be criminal to take matter from a syphilitic or otherwise diseased subject for propagation, so it would be equally so to take it from a calf with a possible tuberculous or other disease. Unfortunately tuberculosis is not very rare among horned cattle, especially among the stabled, in contradistinction to those living in the open air. Bouchaidat says nearly all the stabled milch cows near Paris become tuberculous, and would

die of consumption, except that when the first symptoms appear they are sold promptly to the butcher. Bovine virus from such animals (and we have them in this country, too) would be exceedingly objectionable, and professional men cultivating and issuing bovine virus should be as careful in their selections of cattle as those watchful physicians who would never take humanized virus except from infants sound and healthy above suspicion.

All virus issued should have a reliable guarantee, and every instrument used for removing the cuticle should be thoroughly cleansed after every use and before a subsequent use. The custom of using sewing needles in this city for scratching the cuticle has manifest advantages.

With all care taken what are the advantages of vaccination? Let any one look back into old medical books and he will at once understand what a revolution has been accomplished.

Dr. Mead, a medical luminary of the last century, translated a treatise on the small pox by the famous Arabian physician, Rhazes, who heads one of his chapters as follows:

"OF THE CAUSES OF SMALL-POX; AND HOW IT COMES TO PASS THAT NO MORTAL, EXCEPT BY CHANCE HERE AND THERE ONE, ESCAPES FROM THIS DISEASE."

And in his own treatise, Dr. Mead says that while no one has it a second time, "scarce one in a thousand escaped having it once." In point of fact, wherever the small-pox appeared it swept the community like fire in a prairie, affecting and disfiguring every body and causing a very large percentage of deaths.

Dr. Mead, by the way, was among the first advocates of inoculation in England upon information said to have been derived from that adventurous traveler, Lady Mary Wortly Montagu.

When he first urged it, he was likely to be mobbed for his pains, but

he had a little story to tell that brought the ladies over to his side, and made inoculation not only popular but fashionable.

The doctor found out, upon inquiry, that "this (inoculation) was the invention of the Circassians, the women of which country are said to excel in beauty, upon which account it is very common, especially among the poorer sort, to sell young girls for slaves to be carried away into the neighboring parts. When, therefore, it was observed that they who were seized with the distemper were in less danger both of their beauty and their life the younger they were, they continued this way of infecting the body so that the merchandise might bring the greater profit."

The English ladies took the hint, having also regard for life and beauty, for in those days ectrotic treatment was not a success, and the disease taken in the natural way disfigured the lady for life if, indeed, she survived the attack.

Sometimes we see boils and swellings, and eczematous and erythematous eruptions following vaccination, and the same took place after inoculation, occasionally, due no doubt to the condition of the subject, though great pains were taken to prepare persons, by hygienic management, for inoculation.

Speaking of ectrotic treatment, various authors assert that the total exclusion of air from the surface prevents pustulation; how, then, can pustulation ever occur in the fœtus in utero? I have never met a practitioner who had *seen* such a case, though all had read of them.

Dr. Mead, for one, asserts that he remembered well a case where a pregnant woman attended her husband during an attack of small-pox, who did not take the disease herself, but at full term she was delivered of a dead child. "The dead body of the infant was a horrid sight, being all

over covered with the pustules, a manifest sign that it died of the disease before it was brought into the world." Could he have mistaken any marks of putrescence in the skin for proper pustules? "This I will add," he says further on, "that an infant in the womb may have the good luck to go through the disease, and yet the marks be quite effaced before the birth. He quotes Mauriceau, who was himself said to have been born with the pock marks, to sustain his statement. But is it not probable, or almost certain, that the marks, instead of being effaced, never existed, although the child did pass through the disease in utero, and enjoy immunity ever after?"

Such children were no doubt the rare exceptions to contracting the disease in past ages during the frightful epidemic then so prevalent and so disastrous.

Whether true pustulation can occur in the fœtus in utero I would like to hear from some practitioner who speaks from personal and ocular observation.

Addendum.—Dr. Steuart, our city Health Commissioner, stated, after the reading of this paper, that his father had often spoken of a case seen by himself of an infant born with the pustules. We cannot learn now, however, whether these were definite pustules or mere ulcerations.

Dr. Steuart, in reply to a question, said that thirty-one cases of small-pox had been reported during this season to the Health Department, with ten deaths.

This shows a striking contrast with results after inoculation. Dr. Mead says, that among the properly prepared there was not over one death to one hundred inoculations. By the apparent ratio of deaths as exhibited in this city and at this time, if the small-pox had made its invasion here upon an *unprotected* population, the mortality would have been instead of ten,

not less than *one hundred thousand*. This surely indicates some progress in medicine.

TRANSLATED PAPER.

TUBERCULOSIS.

BY PROF. RINDFLEISCH, OF WURTZBURG.

(Translated from *Virchow's Archiv*, of July 1st, by Eugene F. Cordell, M. D.).

(Concluded).

As a rather more complete differentiation of epithelial-like materials out of the tuberculous inflammatory neoplasm, I regard the many nucleated giant cells, which we meet as a so frequent by-product of the same that there was a disposition for a time to consider them as pathognomonic. The equal size of the nuclei found in a giant cell, its exact oval figure, the nucleolus, round, glistening and lying exactly in its centre, remind one strongly of the nuclei of a very young epithelial stratum. Then to these is added the formation of rows of these nuclei at the periphery of the common protoplasm, which corresponds with the beaded arrangement of the youngest epithelial nuclei and their eccentric position in the protoplasm of the corresponding cells—the well-marked limits between giant cells and adjoining connective tissue, the complete agreement of the nuclei of the giant cells and the youngest epithelial cell-nuclei in their behavior towards staining liquids, especially hæmatoxylin, finally the physiological conduct which in my view assigns to the giant cells a place next to the epithelial cells.

The giant cells appear also, as is known, in bone-marrow. They have here, according to *Kolliker*, with whom I now fully agree, the significance of osteoklasts. Through a vigorous chemical activity, whose products as with the secreting epithelium are directed to the exterior, they dissolve the bone tissue and open thus a way as well for its physiological as pathological resorption,

If one follows their career in tuberculous inflammatory neoplasms, one meets there also everywhere with appearances, which accord with the view adopted by me.

That the giant cells in tuberculous lymphatic glands can become horny tissue was first remarked by *Schuppel*. I found in a scrofulous lymphatic gland which was on the point of suppurating, numerous small abscesses, which had formed around giant cells as though about their local centre (Fig. 1). The giant cells appear here also as an easily isolable, displaceable structure, towards which the stream of purulent exudation is directed, as to a free epithelium bearing surface. That this idea is correct, the observations prove which we may make upon the progress of the ulceration on the fungous granulations of a phthisical joint.

This progress was first described by *Virchow* in a masterly manner. One sees on the surface of the fungous synovial membrane and fistulæ, cream-colored points of suppuration, which appear in great numbers close to each other. They at first are not prominent. Perpendicular sections show that they are scattered through the parenchyma. They then increase and form abscesses as large as millet seed. As such they project and burst, pour out their contents and represent then a new depression in the rough ulcerated surface.

If we follow this development in a series of sections through hardened granulation-beds, we find that the first impulse to the formation of one of the before-mentioned small abscesses which cause the extension of the suppuration into the deeper layers of the tissue is communicated by the deposit of giant cells (of which each abscess contains one) into the tissue of the granulations. The giant cells lie at first more scattered in the lymphadenoid tissue of the fungous granulation. They then become differentiated from

their surroundings by a round clear space. This clear space is yet for a while interspersed with remains of the lymphatic reticulum. In this stage of development the whole impressed itself upon me as a lymphatic follicle which is surrounded by a terminal sinus, and in my manual (edition of 1869) I gave an opinion corresponding to this view. Later the same product was referred to by *Koster* as miliary tubercle. In fact the matter concerns individual giant cells which are implanted in the lymphatic tissue of the granulation. If one adds to this the layer of tissue on the other side of the clear space and immediately adjoining it, the whole can likewise be set down as miliary tubercle, and indeed so much the more readily because this very layer is especially permeated with the above-mentioned greater epithelioid cells. One ought not then to overlook that *the same large celled infiltration borders everywhere on the granulation tissue as a whole*, but especially forms the extreme border of it towards the free space of the synovial cavity. At this last point, as is well known, there is constantly produced a small quantity of pus. This happens also in the interior of the formation of which we are speaking. The clear space around the giant cell is filled more and more with pus, until it presents a small abscess, which opens towards the surface. When this has occurred the surface of the ulcer has an indentation which *ipso facto* and indeed continually is covered with the same layer of large-celled granulation tissue as the surface itself (see Fig 197, fifth edition of my manual).

After this, I do not think that I shall be denied the right to define, for the present, at least, the giant cells as an attempt at epithelial formation. This definition is, perhaps, somewhat narrow, but for the present it is sufficient.

Moreover, the giant cells, as has long been recognized, are not pathognomonic of tuberculosis, but only an accidental product of this disease, as of so many other histological developments.

3. After certain centres of the tuberculous neoplasm have appeared through the heaping up of the epithelioid cells in roundish strings and nodules, there appears a rather coarsely granular albuminous substance in the centre of these parts, which partly forces the cells asunder, partly envelopes them (Fig. 2). I regarded this exudation formerly as coagulated lymph. Now, in view of the great similarity of the round nuclei, I should have nothing to urge to the contrary, if anyone should describe them as a developing zooglœa mass. Distinctive points of difference I have not been able to find. The strong lustre of the nuclei is found as well in the zooglœa masses as in the coagulated fibrin. Methylviolet failed.

The secretion has a remarkable, one might say, guiding influence upon the cells which it presses asunder. These arrange themselves, in general, perpendicularly to the axis or the centre of the strings and nodules and thus we have those "spindle-shaped" arrangements of the tubercle nodules, which doubtless have already come under the observation of many microscopists but which, on the whole, are but little mentioned.

The cells, which fall into the category of these solid "spindle-shaped" compressed masses, behave variously. A greater part of them lose their nuclei (*Weiger's* coagulation necrosis) and melt away into a fibrous substance, originally not altogether homogeneous, but later becoming continuously more and more of the same nature. Another part—I acknowledge that this may also be newly emigrated white blood corpuscles—remains unaffected by this metamorphosis and settles down into the not numerous fissures and crevices of the fibrous product. Finally a tissue may result which has the greatest resemblance to a newly formed connective tissue with

lymph ducts (Fig. 3). One sees how tenacious nature is in the pursuit and execution of her once fully learned artifices. Even under the unfavorable circumstances which the tuberculous virus produces in the interior of the inflamed region, the attempt, at least, is made at a conversion—characteristic of chronic inflammatory products—of the granulation tissue into scar tissue. Be it recollected, however, that in many cases of tuberculous inflammation this fibrous texture of the inflammatory product so dominates that one might almost be tempted to look upon the fibrous tubercle as fibroma, which has undergone caseation.

4. The *caseation* of the tuberculous inflammatory products. Of this I know of nothing new to report. That it is to be regarded as a necrosis from want of nutrition is to me more plausible, at least, than the opinion of those who would recognize in the caseation a specific tuberculous element.

So much for the peculiarities of the tuberculous inflammatory process. Let us now scan the various forms of appearance of the disease as a whole, above briefly sketched and try to find for each one a suitable application of the chief rule.

In the *inoculated tuberculosis* the general affection preponderates over the local processes. The latter do not pass beyond the stage of a very thick infiltration of the peri-vascular connective tissue with round cells, which prevents the blood from reaching the vessels. Whether we shall regard the solitary, often very large masses, which we find in the lungs, liver, &c., of the inoculated animals, as "miliary" tubercle or not, remains for us to decide. At all events the small grey nodules, which are often found near the point of inoculation deserve this title, as will appear clearly from the following:

In the *disseminated miliary tuberculosis* (resorption tuberculosis) of man, we find, in addition to a well-marked general affection giving rise to fever, emaciation, &c., more or less numerous very minute masses of tuberculous inflammation. We regard both as parallel effects of a tuberculous poison circulating in the fluids of the body, which has been produced in the hereditarily tuberculous

organism itself. The smallness of the sites of inflammation suggests that this poison is united with small particulate bodies which produce a punctiform irritation in the tissues. The local processes thus arising are often associated with acute inflammation.

In the *chronic inflammations*, with their slow course and tendency to formation of ulcers indisposed to heal, we have to do with hereditarily tuberculous individuals, who differ from normal persons, i. e. those possessing immunity against the tuberculous poison, in reacting to exceedingly slight irritations, which pass away without traces in the latter. Infiltrates of round cells in the connective tissue of diseased parts linger there long and assume readily the epithelioid character. Later they undergo cheesy degeneration and lead to slow destruction. We may, however, hope, by altering the character of the diseased parts to produce a healthy granulation and cure (Inflammation and scrofulous phthisis).

The "*localized miliary tuberculosis*" finally shows us hereditarily tuberculous individuals in whom the before-mentioned local inflammatory processes have led to the production of new masses of tuberculous poison. These are scattered from the place of their origin into the surrounding parts and there give rise to an eruption of miliary tubercles. That the zone of eruption of the miliary tubercle sometimes extends only to the immediate vicinity, i. e. to the bottom and borders of an ulcer, sometimes forms metastases in the course of the lymphatics leading from the seat of inflammation, has been already advanced above. Only particular stress has to be laid on the point that as regards localized miliary tuberculosis, the propagation takes place through the lymphatics and not through the circulatory apparatus. For this reason these affections are, at least, for a time local, although the general disease and the disseminated miliary tuberculosis do not fail to appear ultimately (Tuberculous phthisis).

Shall I now go still further and cite the individual forms of tuberculosis in order to assign to each its place in one of these categories? I believe that this would be unnecessary with the readers

of *Virchow's Archiv*. It would also very soon be shown that it is dangerous to draw the lines too sharply. In fact the scrofulous inflammations and phthises pass into the localized miliary tuberculosis, and this into the disseminated form through numerous intermediary forms, and I am more especially concerned in keeping together things that belong together, and raising up no walls of separation where they are unnecessary and injurious. Yet this results so soon as we cease to recognize the histological unity of tuberculous inflammation, in order to look upon the miliary inflammatory mass as alone pathognomonic and specific.

CORRESPONDENCE.

OUR NEW YORK LETTER

NEW YORK CITY, Dec. 22, 1881.

At this season of the year this great metropolis shows off to the best advantage. Crowded streets and avenues alive with people, vehicles and every manner of show; shop windows and vestibules gaily decorated with Christmas displays and every tempting device to fascinate and charm the taste, imagination and cupidity of the purchaser, all present in panorama the power, influence and capacity of this great centre of riches and poverty. Here we have in view all that art, science and wealth can contribute to human advancement; all that ignorance, poverty and disease can contribute to human depravity. The rich and poor, the wise and the ignorant are ever in mind to illustrate the successes and failures of human effort and to teach the moral of how to live, how to labor and how to elevate the standard of man's destiny.

Few cities offer such a fruitful field for the study of the problems of social and moral life as does New York. One may well pause and think what is being done here for his race. What is the outcome of this vast struggle for wealth and position, for power and influence? New York is not only

the great commercial and monetary centre of the Western world. It is fast gaining the lead as the centre of intelligence and culture, of art and science, of social caste and refinement, and finally the great leader in all charities and benevolence. Money hoarded and coveted with an avaricious grasp is likewise dispensed with a lavish munificence when the cords of the human heart have been touched by the appeals of the suffering and distressed. Prompt to respond to every form of charity the city of New York takes great pride in her institutions which provide relief for every class of sufferers and by generous distributions of money sets a beautiful lesson in giving to other cities.

Just as this city is in the midst of Christmas festivities, and the gifts of the season are exchanged, an appeal has been made in behalf of hospitals and other charitable institutions here.

The anniversary of Hospital Saturday and Sunday will be held on the 24th and 25th proximo, at which time collections will be taken up in all the churches, hotels and such other places as will enable every one who feels an interest in charitable work to contribute to the hospital fund. The hospital committee are using every effort and have so arranged for the systematic collection of funds that it is believed as large a sum as seventy thousand dollars will be received this year. The plan of collecting for the hospital fund was inaugurated in 1879, and during that year over twenty-five thousand dollars were realized. During 1880 the sum of forty thousand dollars was collected, and over ten thousand patients were cared for out of this fund. The movement has been found popular, efficient and beneficent in its workings and is now regarded as one of the most thoroughly organized charities in the city, appealing as it does to every class, sect and occupation and affording relief to indigent sick without distinction or

partiality, and so arranged as to insure a just distribution of funds where it is calculated to do its utmost good.

In a recent number of the MARYLAND MEDICAL JOURNAL attention was directed to the importance of establishing a Hospital Sunday in Baltimore, and the fact was cited that the Hospital Relief Association of Maryland had resolved to introduce the movement there. As no organized system of operation was suggested, and no plans have been formed by the Relief Association, it may not be improper to call attention to the very well arranged system in use in New York and to suggest through the columns of your JOURNAL the advisability of profiting by the experience of the New York Hospital Committee, whose plan of organization is far superior to the system in vogue in London, from the fact of its being more thorough and far reaching in its collections and more systematic and painstaking in its distributions.

When the fact is considered that there are no less than fifty-four hospitals and thirty-two dispensaries of all kinds in the city of New York alone, independent of the numerous orders and beneficial societies, which take care of their own sick, it becomes evident that a wide field is offered for this form of philanthropy. Not a few of these institutions are largely supported by endowments or by appropriations from the city treasury, others are self-sustaining or must rely upon charitable bequests for a large share of support. It is the purpose of the Hospital Committee to furnish board, lodging and medical treatment to such sick persons most in need of aid. Those who contribute to the fund have the privilege of designating any special hospital, but where no requirements are made by the donor the money collected is divided by the committee in proportion to the number of days of treatment given to free patients by each of the institutions. In other

words those institutions which provide free beds for the largest number of cases receive the largest share of money.

Although the Hospital Saturday and Sunday Association has been in existence but three years, it has developed into a live and useful organization and is doing a noble work among the sick and poor in this city. Efforts are being made to perfect its plan and to popularize it with the masses of people. There is no reason why the amount collected annually should not reach four times the figure which is expected to be realized this year. This can be done by reaching every class of people through a well arranged system of collection agencies. The organization may now, however, be regarded a success, and it is to be hoped that similar movements will at once be inaugurated in other large cities founded upon the same humane and beneficent plan in active and successful operation here.

Apropos to this subject a brief account of several of the more prominent hospitals and other medical institutions in this city may be of interest to the readers of your JOURNAL.

Bellevue Hospital, at the foot of 26th Street and facing East River, is perhaps more generally known than any institution in New York. It is here that daily clinics are held by professors attached to the three medical schools, and what reader of medical publications is not familiar with the immense amount of clinical material which has emanated from its wards? Bellevue affords a large and rich field for clinical study, and well trained observers have from time to time given to the profession the fruits of well earned experience gathered from this vast storehouse of pathological and clinical knowledge. This hospital was founded as far back as 1826. It now numbers 800 beds, but has provision for 1,200. The cost of sustaining it is over \$100,000 annually.

Next to Bellevue, *Charity Hospital*, on Blackwell's Island, in East River, is widely known. This hospital has a capacity of 1,000 beds. It has one surgical, three medical, three venereal, an ophthalmic, a dermatological, a throat and a uterine department. Each department has three visiting surgeons and physicians who do duty alternately for a period of two months. In addition to the visiting staff there is a resident physician who has charge of the management and who is aided in his work by twenty-four physicians and assistants. During the year 1880 7,045 patients were treated in Charity Hospital. Clinics are held daily by members of the Faculties of the three schools in the city.

The New York Hospital, on West 16th Street, is one of the best equipped and most commodious institutions in New York. It was founded as far back as 1770, but the present handsome edifice was formally opened on the 16th day of March, 1877. This hospital has about 150 beds and accommodates annually about 2,400 patients. It is not a charity hospital but charges \$1.00 per diem for patients in public wards and from \$15 to \$50 per week for those treated in private rooms. The expenditures for the year 1880 were \$72,596.86. The library in connection with this hospital contains a valuable collection of books, which number over 12,000 volumes. The library is open daily from 10 A.M. to 5 P. M., and is free. The museum is complete, and contains many rare and valuable specimens.

The Nursery and Child's Hospital was not opened until 1870, but has thus early grown to be one of the best known institutions in the city. It comprises a central nursery and fourteen cottages. Children are also boarded in private families and visited constantly by an agent. During the year 1880, 792 children and 283 adults, total 1,075, were cared for by the hospital. Of this number 52 children

and 5 adults died. The expenses were \$68,591.69.

The Woman's Hospital in the State of New York, an institution known wherever the science of gynecology is practiced by educated men, is located between 49th and 50th Streets, Lexington and 4th Avenues. It has a capacity of 120 beds, 20 of which are free, and the price of others ranges from \$4 to \$15 per week. Clinics are held here every day except Sunday. For the year extending from July, 1880, to July, 1881, 634 patients were treated in-door and 6,415 out-door. The annual expense of running this hospital is about \$37,000. The hospital staff is made up of such well-known gynecologists as Emmet, Thomas and Hunter. It is from this institution that have emanated many of those operations and appliances which have made the science and art of gynecology a name and place in medical history. Perhaps no institution has impressed its influence upon any department of science to the same extent as the New York Woman's Hospital. It may be said that it was under the roof of this institution that gynecology had its birth, education and training. Certainly it is true that it is the very centre of experimental study in all that pertains to the diseases of women, and its influence is manifest wherever these diseases are intelligently and skillfully treated.

The Hospital of the New York Society for the Relief of the Ruptured and Crippled is an institution which renders valuable service to a number of unfortunate cases. It is located at 42nd Street and Lexington Avenue. It maintains and cares for children of wet nurses, lying-in women and their infants. During the year ending March 1st, 1881, 548 children and 421 adults, total 969, were cared for. One hundred and eighty-one children were born during the year and 93 died. The annual expense of this institution is about \$63,000.

An account of the hospitals in this city would be incomplete without a mention of the *Roosevelt* and *St. Luke's Hospitals*, two institutions well and widely known in medical literature. The former was endowed by the will of the late James H. Roosevelt. It was incorporated in 1864 but was not opened until Nov., 1872. It is built upon the pavilion plan and accommodates 180 patients.

St. Luke's Hospital was founded in 1846 and opened May, 1858. It receives patients from all denominations, and has 60 "charity beds," each supported by endowments of \$3,000 for life of donor, or \$5,000 in perpetuity or by an annual subscription of about \$300. It has a capacity of between 150 and 200 beds and is conducted at an annual expense of \$66,000.

In addition to the 54 hospitals in the city of New York, the more prominent of which have been mentioned, there are 32 free dispensaries which give treatment and medicine to a large number of patients. Of these, the largest and best known are the New York Dispensary, corner of White and Centre Streets, where over 20,000 patients are treated annually; the Demilt Dispensary, 2nd Avenue and 23rd Street, 18,000 patients annually; the North Eastern, 222 E. 59th Street, 23,000 patients annually, and the Out-Door Department of Mt. Sinai Hospital, where 23,687 patients were treated in 1880.

MEDICAL SOCIETIES OF NEW YORK CITY.

The city of New York numbers 26 medical societies of different characters and engaged in general or special work. There is an ophthalmological, a dermatological, pathological, obstetrical, laryngological, neurological and therapeutical society, each having a separate and independent organization and composed of men interested in these special branches. These societies meet upon the average once a month at the dwellings of the members. In

addition to these organizations devoted to special work there are other local societies for professional and social intercourse, whose membership is more or less confined to certain sections of the city. Again, there are larger and more influential bodies which draw men from all sections of the city, from all the specialties and all professional interests. Prominent among the latter class is the New York Academy of Medicine, which perhaps, exerts the largest influence of any medical organization in the city. The Academy was organized in 1847 and incorporated in 1851. Its stated meetings are on the first and third Thursdays of each month. It meets in its own hall, located in a handsome house No. 12 W. 31st Street. The Academy has a membership of 350. The annual fee is \$10, and the initiation fee is \$20.

The Academy has a section on obstetrics and diseases of women, which meets on the fourth Thursday of each month; a section on theory and practice, which meets on the third Thursday of each month, and a section on surgery, which meets on the second Thursday of each month.

The library of the Academy, located in the same building as its hall, is one of the best arranged and most complete collection of books owned by a medical society in this country. The library now numbers about 19,000 volumes! During the year 1881, 2,144 volumes, and 1,523 pamphlets were added. The circulating department, separate from the other, is made up of duplicates and now numbers 3,000 volumes. The library subscribes to 140 foreign and domestic journals at an annual cost of \$800. It buys very few books but receives donations from members and authors. The library has had large donations from individuals, among which may be mentioned valuable gifts from Dr. S. M. Purple and Dr. F. J. Bumstead. Dr. Du Bois, a member, very generously do-

nates new books whenever called upon. All of the members of the Academy take a pride in its library, and each member is expected annually to donate one or more books. It is in this manner that this library has been made so valuable to the profession of New York. The amount which each individual member may give to a library is scarcely felt, but the total sum adds yearly a collection of rare and valuable works of great use and value to the profession at large.

Though supported by the Academy of Medicine at an outlay annually of some \$3,000, the library is open the entire day until 9 P. M. to any member of the profession who may visit it. During the past year there were 4,000 visits to the library, which fact attests its general use by the profession. The librarian, Dr. E. D. Hunter, Jr., is indefatigable in his attention to the wants of the library, and takes great pride in its welfare. A good librarian is a *sine qua non* to a library, hence the thorough system and order in this well conducted institution. The library of the Academy is *par excellence* the medical library of New York. There are several smaller collections of books in connection with other institutions, but their sphere of usefulness is limited.

At another time the writer will take occasion to refer to the medical schools and other medical interests here. He is reminded, by the length of his communication, that he has consumed more of your space than was allotted to him.

A.

SOCIETY REPORTS.

CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD NOV. 18TH, 1881.

(Specially Reported for the Maryland Med. Journal).

I. EDMONDSON ATKINSON, M. D.,
President, in the Chair.

Routine business being dispatched,

Dr. Michael read a paper entitled AN INTERESTING CASE OF STRANGULATED HERNIA CONSERVATIVELY TREATED, and *Dr. Wm. Lee* one on NERVOUS DIARRHŒA, both of which appeared in the last issue of the MARYLAND MEDICAL JOURNAL.

AMPUTATION AT HIP-JOINT.—*Dr. Tiffany* reported the following case: A young man, æt. 20, came under his care three weeks ago complaining of pain in his left thigh and a large, semi-fluctuating, extremely tense growth, attached to the corresponding femur. He was unable to walk without crutches. His symptoms were of four to six months duration. His father had had cancer of the eye, of which, after enucleation, he died. No other members of his family had suffered from tumors. There was no history of syphilis, but as his pain was characterized by nocturnal exacerbations iodide of potash was ordered with mercurial inunctions. Under this treatment his pain diminished, he was able to sleep well at night without opium and to walk without crutches. One day, however, something gave way and he fell. *Dr. T.* then found fracture at the junction of the middle and upper thirds of the thigh and diagnosed malignant disease of femur. Amputation at the hip-joint was advised, and, the patient consenting, was performed four days ago by antero-internal and postero-external flaps by transfixion. Drainage tubes were introduced at either extremity of the wound, which was dressed with oakum and carbolized oil. The growth—probably a spindle-cell sarcoma—extended as high as the junction of the middle and upper thirds of the bone. The patient's condition has continued favorable up to the present time, and permission had been given for him to sit up in a chair to-day.

Dr. Michael had performed the same operation four years ago on a young Irishman, who had been run over by a car-wheel, which crushed his left thigh and right ankle. Amputation was performed on the left side at the hip, on the right at the middle of the leg. There was but little hemorrhage, and the patient did well for three days, when the temperature went up to 106°, and the case terminated fatally.

MICROSCOPIC SPECIMENS OF BACILLI LEPRÆ AND LEPROUS TISSUE.—*Dr. Bermann* exhibited under three microscopes specimens of bacilli lepræ and leprous tissue, from the skin tubercles of a patient affected with leprosy. Under a 1-12 inch objective (600 diameters-Nachet) the tissues were seen to be filled with the organisms which were stained very dark. These organisms can only be shown by aniline staining and by a peculiar method of illumination. Light must be thrown on them in such a way that scarcely anything else can be seen. *Dr. Bermann* has made no experiments upon living animals to test their infectiousness. Occasional holes are found in the tissue, which are supposed to be characteristic and to be due to its destruction by the bacilli.

STATED MEETING HELD DEC. 2ND, 1881.

RECTO-VULVAR FISTULA CAUSED BY ABSCESS OF BARTHOLIN'S GLAND.—*Miss F. S.*, age about 23, of strumous diathesis, suffered during July last, while in the country, from an inflammation of the left labium, for which she applied poultices, and finally an abscess formed, which broke on the mucous surface of the vulva and discharged a large amount of pus. The suppuration continued until she returned to the city about the first of September, when she noticed for the first time that flatus passed through the fistula and shortly afterwards fecal matter also made its appearance. She consulted me at this time, and I found a fistulous opening on the left side leading from the labium majus to the lower bowel, passing in the direction of Bartholin's gland. Not wishing to divide the perineum if it could be avoided, she was put upon a tonic and alterative treatment of the syrup of the iodide of iron and iodide of potash, &c., and topical applications of tinct. iodine and nitrate of silver were resorted to but without any beneficial result. On October 12th, when it had been determined to operate, Bartholin's gland on the opposite side became swollen and tender, and felt as large as a hickory nut. The inflammation in this gland subsided sufficiently by the 22nd to admit of the operation on the fistula. In order to avoid as far as possible any weakening

of the perineum the incision was made directly outwards from the mucous surface and to the left of the median line. The fistula has now healed up from the bottom, and the integrity of the perineal body is not in the least impaired. In order to avoid any further trouble with the other gland, which was chronically enlarged, I determined to extirpate it at the same time, but upon catching it up with a double tenaculum and snipping the mucous membrane and the sac, about a teaspoonful of clear fluid was discharged and the sac collapsed, and has not been perceptible since.

These recto-vulvar fistulæ are of very rare occurrence, and are seldom mentioned in the text-books; and their existence has been denied by many gynecologists. With his large experience *Dr. Goodell** states that he had only seen one case in his practice up to Sept., 1880.

A CRITICAL, HISTORICAL AND CLINICAL STUDY OF SMITH'S ANTERIOR SPLINT.—*Dr. Michael* read an elaborate paper with this title. After some general remarks it alluded to the complicated and cruel methods of treating fractures, in vogue 100 years ago, and which led John Bell to denounce the instruments then in use as instruments of torture, comparable to those employed by the Inquisition. Whilst we have not yet attained to unanimity of practice, the simplicity of our treatment is in striking contrast to that just mentioned. For fracture of the thigh in this country three great plans of treatment are advocated, viz: Straight extension variously modified; plaster of Paris or other immovable apparatus; and the double-inclined plane in one or other of its forms. The anterior splint belongs to the last class, having the additional feature of suspension. The fracture-box was hardly considered worthy of comment, since it has fallen into almost universal and deserved neglect. The great principle involved in all plans is extension, which some advocate should be made in the beginning once for all, the fragments being retained in apposition afterwards by suitable apparatus, others that it should be continuously maintained in a gentle manner

**Phil. Med. Times*, Sept. 11th, 1880.

over a lengthened period of treatment.

The author then sketched the history of suspension in the treatment of fractures of the lower extremity. He maintained that the anterior splint was not the work of one man, but was the perfection of an idea which originated about 100 years ago, and had since been elaborated by several workers. The earliest instance discoverable of the application of suspension in this connection is contained in Benjamin Bell's Surgery, published towards the end of the last century. We learn there that James Rae, of Edinburgh, employed it in fractures of the leg, and his rude apparatus is delineated. The principle was taken up successively by Benjamin Bell and John Rae, a son of the first Rae; by Ravaton, of France; by Sauter, of Switzerland; N. R. Smith; and Mayor, also of Switzerland. Sauter "was the first to apply it to the thigh (1812). Smith's first instrument (1832) was a posterior suspension apparatus (with the shape of the double-inclined plane). Mayor described his instrument in 1839, and this was the immediate predecessor of the anterior splint, which was described as follows:

"It consists of a parallelogram of wire about the size of a No. 10 bougie, about three inches wide and six or eight inches longer than the limb to be treated. Cross wires connect the two parallel wires at intervals of about six inches and these are twisted so as to make a ring in the middle, to which the hooks used in suspending are attached. Two hooks are used, one at either end of a stout cord about eighteen inches in length. This cord plays through a ring, or hook in a longer end, which passes through a pulley secured in the ceiling, and is made fast by a tent-block, thus allowing the elevation of the limb to be changed at will. The splint can be bent over the back of a chair or other convenient support at the hip, knee and ankle, to suit the exigencies of the case in hand, the uninjured limb serving as the guide for the flexures."

In its application the fracture is first reduced and then retained in position while the surgeon attaches the instrument to the limb; the bandage is then applied around both limb and splint,

from the toes upwards, a few turns being carried around the lower part of the trunk above. The limb is then suspended by the cord, whose obliquity is directed towards the feet of the patient. In bandaging, the seat of fracture may be left exposed, or the bandage may be sewn to the side wires of the splint and its entire front cut away, leaving the entire anterior part of the limb open to inspection.

The anterior splint has been modified by various surgeons, among whom are Hodgen, Coskery, Palmer, U. S. N., G. E. Porter and Simmons. The extensive use made of it during the late war, especially in the South, was commented on, and the views of authors who have written upon it were freely quoted. For twenty years it has held its own among Baltimore surgeons. The paper was copiously illustrated.

The following are the conclusions deducible from Dr. Michael's researches and experience.

1. Suspension for fractures of the lower extremities did not originate with Prof. N. R. Smith.
2. The idea of an *anterior splint* was original with him.
3. The anterior splint has not received the attention it merits.
4. As a rule it is the best instrument for all fractures of the thigh.
5. As a rule it is the best instrument for compound fractures of the leg.
6. It is peculiarly efficacious in compound fractures of the lower extremity.
7. It acts on well-recognized surgical and anatomical principles.
8. It does *not* produce extension in the modern surgical sense of that term.
9. It does better, it returns the fragments in apposition by relaxing the muscles.
10. In a great majority of fractures of the thigh continuous extension is unnecessary.
11. It is cheap, simple and comfortable; easy of application, and allows considerable freedom of movement and perfect access to the seat of injury.
12. It is not the only proper apparatus for treating fractures of the lower extremity.
13. In simple, extremely oblique fractures, one of the continuous extension

methods (as Gurdon Buck's) is the best.

14. The various modifications of it are in no sense improvements.

ACADEMY OF MEDICINE.

STATED MEETING HELD DEC. 6TH, 1881.

(Specially Reported for the *Maryland Medical Journal*).

LITHOTRIPSY; THE INSTRUMENT GETS CLOGGED AND CANNOT BE CLOSED; FORCIBLE WITHDRAWAL THROUGH THE URETHRA—Dr. Alan P. Smith reported the following: A man, æt. 63, suffering for 5 or 6 years with symptoms of stone in the bladder. A very hard stone, one inch in circumference, was detected; it seemed to be a "mulberry" calculus. The lithonriptor was introduced. The stone was extremely hard, but finally broke. The fragments were then crushed—all that could be found. When this was completed, it was found that the instrument could not be closed; an interval of $\frac{3}{4}$ to 1 inch remained between the blades. The necessity of suprapubic lithotomy presented itself, but, as a preferable expedient, it was determined to extract the instrument forcibly through the urethra. After great effort this was finally accomplished, when it was found that the heel of the instrument was impacted with the powdered stone, and so firmly that it required 15 minutes cleaning before the instrument could be closed. The bladder was thoroughly washed out and all the fragments removed. The patient was then put under the influence of opium. There was a good deal of hemorrhage and pain, with smarting in passing water, and ecchymosis about the penis and scrotum, but no urinary infiltration. The patient did well after the first day.

LITHOTOMY; EXTRACTION OF A STONE WEIGHING THREE AND ONE-HALF OUNCES.—A gentleman, who had suffered for years from calculus. Two weeks ago Dr. S. endeavored to crush it, but it was very large and slipped every time. Bigelow's instrument was tried with like ill-success. The patient lost a great deal of blood during these efforts and was on the table, under chloroform anæsthesia, a long time. After the operation, he fainted repeatedly, necessitating hypodermic injections of whiskey and

ether, with removal of the bandages, and inversion of the body. Notwithstanding the immense amount of handling to which he had been subjected, there was but little trouble resulting. Four days ago lithotomy was performed. Every effort to extract, even with the use of very great force failed. Finally a very long and strong forceps—used by Prof. N. R. Smith years ago—in one of the blades of which there was a saw attachment, was introduced and the stone crushed, and this permitted its extraction piecemeal. The fragments collected weighed $\frac{3}{4}$ iij—and perhaps $\frac{3}{4}$ ss was lost. The patient is doing extremely well—pulse and temperature being normal, and the urine passing for the most part through the urethra.

In answer to a question of one of the members, Dr. Smith stated that he had performed lithotomy 68 times, with one death. This occurred in a gentleman, æt. 65, who died on the ninth day. There was but little hemorrhage during the operation, which was performed under chloroform. After its completion, he fainted but rallied after a hypodermic of whiskey. The syncope recurred in 30 minutes and for several hours continued to recur at intervals, but finally disappeared under the use of whiskey and carb. ammonii. He then did well for eight days. At the end of that time there was some obstruction to the flow of urine, and Dr. S. passed in his finger into the bladder, which opened the cut and gave relief. The fainting attacks came on shortly after and continued until death. The patient had no pain and took his food well for eight days.

INSTRUMENT FOR PASSING SUTURES IN STAPHYLORRHAPHY.—Dr. Smith also exhibited an instrument employed by Langenbeck for passing the sutures in the operation of staphylorrhaphy. The chief difficulty in this operation is to pass the needles in nicely and neatly; this is accomplished by the instrument in question, which contains at the extremity a firm hook terminating in a hollow needle, through which works a golden wire. The needle is made to transfix the parts, the wire is pushed out, the suture attached to it, the wire then withdrawn, and thus the edges of the palate brought together. Dr. S. thought

the instrument was adapted to gynecological operations.

EPILEPSY MISTAKEN FOR ANGINA PECTORIS.—*Dr. Smith* also reported the following case: A gentleman, æt. 47, connected with the manufacturing mills of Boston, and a great brain-worker, applied to him four weeks ago. He had been sent South for supposed angina pectoris. He suffered from peculiar attacks, of which he had had from four to nine every night for two months; he had only had two or three in the daytime. He had been taking nitro-glycerine. The attacks were not altogether like angina pectoris; he had many of the symptoms of this disease, but lacked the peculiar pain in the left arm. He lost his consciousness entirely if the attacks were bad and he went to sleep after they were over. *Dr. S.* concluded it was epilepsy and ordered a M. containing bromide of potash and bromide of ammonium, of each ten grains, iodide of potash, five grains. Under this treatment the attacks ceased very promptly, and the patient returned home well to-day.

RISKS OF CHLOROFORM ANÆSTHESIA.—*Dr. Wilson* said that he preferred chloroform to ether as an anæsthetic, and for thirty years had given it (some 3,000 to 4,000 times) for everything with never any apprehension, and with no appearances of danger until very recently. Since the last meeting of the Academy the following case had come under his observation: A young lady suffered from mechanical dysmenorrhœa due to sharp ante flexion and induration of the cervix. He advised slitting of the cervix. The patient had taken chloroform before. On the day appointed for operation, his assistants were occupied, and the agent was administered by another. She took it well and but little was required to produce an effect. Before the operation was completed, the patient began to come to, and he directed that she should have more. Presently the vagina was noticed to cease to rise; it was then found that she was black in the face, and pulseless. At once she was suspended by the feet, the tongue pulled out, and eight or ten hypodermic injections of brandy given. Under these energetic measures she was resuscitated.

If she had died, the death would have been put down to the *use* of chloroform, when it would have been due to its abuse, for the attendant was so anxious to see the operation that he left the towel in contact with the patient's nose whilst he looked on.

Dr. A. P. Smith had once seen a death from chloroform, where it was not improperly given. The case was one involving amputation of the leg. The anæsthetic was given carefully, whilst he held one pulse and *Dr. Milholland* the other. There was no struggle, no warning, but suddenly the patient ceased breathing and no effect at resuscitation had any effect.

In answer to a question *Dr. Chew* stated that valvular lesions were not contraindications to the use of chloroform when accompanied by the compensatory hypertrophy, but it was extremely hazardous to employ it in advanced dilatation and true fatty degeneration.

EDITORIAL.

HOW CAN MALARIAL DISTRICTS BE RENDERED HEALTHY?—*Prof. Corradi Tommasi-Crudeli*, of the Royal University of Rome, who has recently acquired such notoriety in connection with his researches upon the germ origin of malaria, contributes an interesting article to the October number of the *Practitioner* upon the drainage of the Roman Campagna. He starts out by declaring that malaria is not necessarily connected with the presence of marshes, ponds or rivers, nor with the decay of organic matters, and that two thirds of the malarial districts in Italy are at considerable heights, and even upon mountains. The surface of the soil may be perfectly dry, and yet the malarial miasm may prevail, provided the soil below be kept even moderately moist and the air have free access to it by means of crevices or pores in the earth. He does not deny that drainage of surface water—especially if the surface so drained be covered with earth from healthy localities—has often been successful in suppressing malaria in districts so treated. But he claims that the most important part of the problem, viz: the disinfection of malarial districts which

are not and never have been marshy, has been entirely overlooked, and that the solution of this involves a study of the geological composition of the soil. He takes as an illustration, the Campagna of Rome, which consists of broken ground, four-fifths of which are constituted by the hills rising on either side from the valley of the Tiber. These hills are almost all bare of wood and covered with turf or crops of corn. In fact several of the eminences upon which Rome itself is built belong to this region. Thousands of little marshes or ponds cover this region, but the influence of these in the production of malaria, it is claimed, has been much exaggerated, and if they were absolutely dried—and this actually takes place sometimes during a long and dry summer—the work of disinfection would not be greatly advanced. It is the storage of water in the soil below the surface, resulting in part from the absorption of the rain by sand, loose volcanic matter, etc., that supplies the requisite degree of moisture for the vitalization of the malarial germs. The “paludine prejudice of the schools” has prevented the author from appreciating this fact until very recently. But the small quantity of rain which falls here is in striking contrast to the great number of perennial springs and ponds to be met with on the sides and at the base of the hills. The origin of all this subterranean water, has been traced to the mountain lakes which occupy the sites of extinct volcanoes in the Campagna, the water of which owing to the altitude at which it is placed and its depth is subjected to a pressure of several atmospheres, which causes it to filter into the more permeable layers of the walls and bottom of the craters and thence descend in the direction of the river valleys. To rid the interior of the Roman hills from the waters imprisoned in them is the main question for solution.

The fact that this region was inhabitable by a numerous population up to the period of the decline of the Roman empire indicates that the inhabitants had some means for modifying or suspending for many ages the activity of the malarial germs. For a long time we were in ignorance of this means, and it is to the recent researches of M. Di Tucci, a

Roman engineer, that we owe their discovery. It has long been known that there were tunnels in the hills, of an average height of five feet and breadth of $1\frac{3}{4}$ feet, the object of which was supposed to be to serve as conduits for drinking water; Di Tucci has discovered that they are galleries forming part of a vast system of drainage for the removal of the water from the hills. M. Tommasi-Crudeli, aided by the construction of the new fortifications of Rome has been able to confirm in an unquestionable manner the views of Di Tucci. The tunnels communicate with one another forming systems, and freed from the deposits filling them often resume their functions of drainage.

The origin of this system of drainage is probably of very great antiquity, which explains the silence of all the Roman writers in regard to it. It was probably so universally known that it was thought not worth while to allude to it. “We can easily imagine,” says the author “that the humidity of these soils must have been very different in antiquity from what it is now,” and concludes by leaving this glimpse into the means employed by the ancients to render four-fifths of the Campagna healthy to serve as a guide to future investigations upon this subject of such vital interest to the welfare and prosperity of reunited Italy and of its capital.

HOSPITAL RELIEF ASSOCIATION OF MARYLAND.—The first annual report of this organization has just been published, and contains matter of interest to the profession as well as the public. The inception of this enterprise dates back about $2\frac{1}{2}$ years and was due to a conviction of the wants of the patients in the hospitals of Baltimore. For some time there was no formal organization, but in May 1880, an association was formed, which was incorporated in the following December. The scope of the work contemplated embraces the decoration of the wards with pictures and colored texts, the donation of flowers, fruit, clothing and delicacies to the patients, the formation of hospital libraries, etc. Besides these, the endowment of free beds and the founding of a home for incurables, have been taken up as secondary objects. In con-

nection with the latter, a fund of several hundred dollars is already in hand, and at the late meeting, on motion of Rev. Dr. Walter Williams, a committee of twelve prominent gentlemen was appointed to assume charge of the enterprise and push it forward. The need of a special institution for the reception of this class of patients in this city is very urgent; there is no place at present accessible to invalids of this character without means, except the City Almshouse. Still another work very recently undertaken by the association is the founding of Hospital Sunday in Baltimore, a movement which if properly directed cannot fail to receive warm sympathy and support.

The revenue is derived from membership dues and donations, and amounted during the year to nearly \$1,000, of which \$300 remains in the treasury at the close of the year.

A comprehensive view of the immense amount of work accomplished since the organization of the association can only be gained by reading the details, for which we of course have not the space, but the following summary will give some idea of it: 261 visits, 100 pictures, 3 handsome bookcases, 2,158 books, 400 garments, 50 texts, 1,268 bouquets of flowers, besides fruits and delicacies.

The work is under the control of nineteen managers, the number being limited by the constitution to twenty.

It is gratifying to see that the profession is well represented in the membership and contributions to this most useful charity, which undoubtedly is destined to grow to very great proportions, since it has within itself all the elements of success—youth, enthusiasm, public sympathy and above all a good cause.

THE NEW YEAR.—By the time these lines reach the reader the year 1880, with its memorable events, will have been numbered with the past, and we shall have entered upon another one of these annual stages of our existence. At such times it is profitable not only to take a retrospective glance at what is behind us, but also to look forward to the future, and try and find out its most pressing duties, and to nerve ourselves for its trials and disappointments. If

we have met with success in the past year, if our plans and undertakings have prospered, this should encourage us to continue in every good word and work; if we have, on the contrary, encountered failure and adverse fortune, we should not be discouraged but avail ourselves of the experience thus gained to secure future success.

Who can penetrate the veil of futurity—who, foretell the events that lie hidden in the womb of the new year? Yet, although we cannot foresee what shall be, the future is not entirely beyond our reach. No event, however insignificant, is without its influence upon future events; force is never lost, it is only converted into other forms of activity, and so once set going its momentum is imparted to other forces with which it comes in contact, and through them to others *ad infinitum*. The present is ours; we can leave deeply our impress upon it. We may *now* plant the seed of a harvest that may ripen months or years hence. We may do good deeds that posterity alone may appreciate and feel the benefit of.

In this reawakening time, when action and progress are the watchwords of the hour, the sphere of one's usefulness is much increased. Omitting the duty to oneself (which we are not generally prone to forget) how many ways are there in which we can advance the interests of our chosen profession—in our societies, by our contributions, by carefully reported study and observation, by words fitly spoken or wisely left unuttered, by the most powerful of all teachers—example. In our efforts at self-aggrandisement let us not forget that we are members of a great profession. Let it ever be with us a supreme duty to cultivate and encourage an *esprit de corps* in our ranks and uphold the interests of our common order, never forgetting that it is no less true of associations of individuals than of individuals themselves that

"We live in deeds not years—in thoughts, not breaths;

In feelings, not in figures on a dial.
We should count time by heart-throbs.

He most lives,

Who thinks most, feels the noblest, acts the best."

SUCCESSFUL HIP-JOINT AMPUTATION. We chronicle in this issue a case in which amputation at the hip was recently successfully performed in this city by Professor L. McLane Tiffany. Over five weeks have now elapsed since the operation, and the patient is up and walking about. A similar case was reported about a year ago by Dr. Rusk, a practitioner of Baltimore.

REVIEWS & BOOK NOTICES.

Anatomical Studies Upon Brains of Criminals; a Contribution to Anthropology, Medicine, Jurisprudence and Psychology. By MORITZ BENEDIKT, Professor at Vienna. Translated by E. P. Fowler, M. D. William Wood & Co., 1881. 8vo. Pp. 185.

This author has sought to lay the foundation of a natural history of crime by examining the brains of a number of Hungarian criminals, who had been imprisoned for murder, robbery, counterfeiting, &c. "That man feels, thinks, designs and acts according to the anatomical construction and physiological development of his brain" is a proposition which has long lain dormant in the human mind. Do criminals furnish proof of the truth of this proposition?

The number of observations amount to 22. Each is illustrated by three photographic views, and accompanied by brief descriptions of the criminal, with the offence which he had committed. Each observation is worked out with the most laborious detail, the cerebral surface being studied in all of its aspects. This is followed by an elaborate analysis of his observations, in which the author exhibits that modesty in drawing conclusions which always characterizes the true scientist. The following illustrates: "There remains nothing more, for the present, at least, but to express the proposition: *The brains of criminals exhibit a deviation from the normal type*" (he previously states that this deviation is mainly a deficiency—de-

ficient gyrus development—and a consequent excess of fissures: defects which are evident throughout the entire extent of the brain) "*and criminals are to be viewed as an anthropological variety of their species, at least among the cultured races.*" This proposition is calculated to create a veritable revolution in ethics, psychology, jurisprudence and criminalistics. For this very reason it should be handled with the greatest prudence; it should not yet serve as a premise; and for the present it should not leave the hands of expert anatomists. In matters of fact it must yet be repeatedly proven and that from many different points of view until it can finally rank as an undoubted addition to human science."

For those not conversant with cerebral anatomy an introductory chapter on the subject is given.

The doctrines of Gall find no support in the researches of Benedikt.

In conclusion, we must say, that whether the author has proven his points or not, here is a mass of scientific facts in a new field which cannot but excite interest and lead in the end to valuable discoveries, and that no one who aspires to a thorough knowledge of the physiology and pathology of the brain should fail to make himself acquainted with them.

A New Form of Nervous Disease, Together With an Essay on Erythroxylon Coca. By W. S. SEARLE, A. M., M. D. Fords, Howard & Hulbert, New York, 1881. 8vo. Pp. 138.

Unlike most modern discoverers of new diseases, the author modestly refrains from attaching his name to this, for which, in view of his acknowledged ignorance of its pathology and site, he cannot find any appropriate title. The affection which he claims to have discovered is characterized by a sensation of sudden *shock, blow or explosion* in some part of the head, usually the occipital region; this is almost uniformly accompanied by intense

vertigo. The shocks are repeated at longer or shorter intervals; they are unaccompanied by convulsions, subsequent drowsiness, and rarely by loss of consciousness. A passive congestion, which the author believes is usually confined to the cerebellum, always follows the shock, and sometimes precedes it; "not seldom it is the sole symptom, shock never being developed." The shocks are prone to occur during sleep. Twenty-one cases are more or less fully related in illustration. The author is inclined to consider it as one of the results of American civilization, i. e., fast living, Charcot is quoted as coinciding with the author in regard to the novelty of the affection, but Hammond and Beard dissent from this view, the former regarding it as a cerebral hyperæmia, the latter as neurasthenia. In the author's experience it was almost always curable. The affection is very chronic. The author found coca very effective in the treatment.

Fourth Annual Report of the Presbyterian Eye and Ear Charity Hospital.

The annual report of the above-named institution for the year ending December 1st, 1881, indicates a most judicious management of this hospital. During the year 3,145 patients suffering from eye, ear and throat diseases, were treated. These paid 21,057 visits or an average of less than 7 visits before relief was obtained. Of these 2,550 were treated for eye diseases, 327 for affections of the ear and 286 for throat diseases. 222 patients were treated in the wards of the hospital. The daily average was 70. The largest number seen upon any one day was 142. During the year 591 operations were performed as follows: cataract, 62; artificial pupils, 25; tear drop, 82; crossed eyes, 106; removal of lost eyeballs, 10; optico-ciliary neurotomy, 6; diseases of lids, 81; pterygium, 17.

Since the founding of the institu-

tion a total of 10,154 patients have been treated. 2,301 operations have been performed as follows: cataract, 218; squint, 381; tear drop, 272; iridectomy, 94; pterygium, 76; enucleation of lost eyes, 71; optico-ciliary neurotomy, 14; surgical operations on lids, 377. Chloroform has been invariably used with most happy effect. All cataract operations are performed under this anæsthetic.

This is the only Charity Eye and Ear Hospital in Baltimore, and the good work it is doing is shown by the very large number of cases treated. It is the purpose of the managers of the hospital to erect during the coming year a hospital building sufficiently large to accommodate the annual increase of applicants for treatment.

The large amount of material offers the very finest clinical advantages, and Prof. J. J. Chisolm, the surgeon in charge, has taken advantage of this fact and now gives daily clinics to medical students at 2 o'clock. For a practical study of eye, ear and throat diseases the advantages of this hospital are unsurpassed by any institution in this country.

The hospital staff is as follows:

For Eye and Ear Diseases.—J. J. Chisolm, M. D.; J. E. Michael, M. D.; W. W. White, M. D.; H. Harlan, M. D.; J. L. Doerksen, M. D.

For Throat Diseases.—F. W. Pearson, M. D.; J. F. Perkins, M. D.

MISCELLANY.

LAWSON TAIT AND BATTEY'S OPERATION.—Lawson Tait (*Med. Times and Gazette*, Nov. 26, 1881, p. 623) protests against the removal of uterine appendages being styled "oöphorectomies" or "cases of Battey's operation," because it is a well established fact that removal of the Fallopian tubes is quite as necessary as removal of the ovaries. "In fact," he says, "I think it is far more necessary in all cases, for upon the tubes, it seems to

me, the periodic function of menstruation exists, and ovulation and menstruation are wholly independent the one of the other. As Dr. Battey limited his definition of the operation he performed to the removal of the ovaries, I would plead for this that I advocate, if we are to indulge in clumsy pedantry, the name of *salpingo-oophorectomy* or *prosthokotomy*. If the names of the advocates of the various proceedings are to be employed—a practice I object to—then it should be called "Tait's operation," but not "Battey's." Dr. Battey practically purposed his operation for the "production of the menopause or the arrest of ovulation." I am wholly indifferent on the question of ovulation in most of my cases and care not about the menopause in a large number. Therefore, in the whole of my large experience, I have only three cases of "Battey's operation." One has been a complete success; the second I am not sure about, as I have lost sight of her; and the third I am afraid will turn out a failure though it is too soon yet to pronounce judgment."

HEPATOTOMY.—Lawson Tait has operated four times for hepatotomy, two published and two others will form the subject of a special paper. The operation consists in opening the abdomen, then opening the liver, stitching the edges of the two incisions in accurate adaptation and draining the cavity. He says, "I can now count seven cases without a death, and these are all that have been performed up to the present date."

OYSTERS SPOILED IN COOKING.—The fawn colored mass which constitutes the dainty of the oyster is its liver, and is little less than a mass of glycogen; associated with the latter but withheld from actual contact with it during life is its appropriate digestive ferment—the hepatic diastase. The mere crushing of the dainty between the teeth brings these two

bodies together and the glycogen is at once digested, without other help by its own diastase. The oyster, in the uncooked state, or merely warmed, is self-digestive; but in cooking, the heat employed immediately destroys the associated ferment and a cooked oyster has to be digested as any other food.—*Roberts*.

FURRED TONGUE OF INDIGESTION.—There is a perfect layer of debris of food and dead epithelial scales, indicative of the state of the lining membrane of the digestive canal. Not uncommonly purgatives have been taken, but if mercury have not been employed no improvement has followed in the condition of the tongue. A mercurial will usually produce the desired alteration, but sometimes needs repetition, together with the use of a mixture containing nitromuriatic acid and small doses of sulphate of soda for a week or longer.—*Fothergill: Indigestion and Biliousness*.

TREATMENT OF CONSUMPTION.—*Dr. Saundby*, in the *Practitioner* for October, tabulates the remedies needed as follows:

Specific.—Quinine, cod-liver oil.

Cough.—Liquorice, camphor, codeia lozenges.

Bronchitis.—Turpentine inhalations.

Purulent Expectoration.—Eucalyptus inhalation, sulphate of iron.

Anorexia.—Quinine, peptonized food, malt extracts, cod-liver oil, ether, alcohol.

Diarrhœa.—Sulphuric acid, starch and opium enema, ergot enema.

Sweating.—Sulphuric acid, atropine, picrotoxin.

Hæmoptysis.—Sulphuric acid, ergot, ergotine.

DIGITALIS IN SYNCOPE AND COLLAPSE.—Digitalis is a very useful remedy here. Formerly alcohol alone was used. One of the advances of modern therapeutics has been to teach the danger of giving large doses of alcohol in cases of surgical shock.

Belladonna and digitalis are proper remedies given by hypodermic injection. The pulse begins to fill up in twenty minutes or half an hour. No irritation is produced at the point of puncture. Throw in twenty minims at once and expect to find the result in half an hour.—*H. C. Wood, Phila. Med. Times.*

PRIZE COMMITTEE.—The following have been appointed as the committee to decide upon the merits of papers presented in competition for the Baltimore Academy of Medicine Prize to be awarded at the annual meeting, March 7th, 1882: Drs. T. F. Murdoch, Samuel Theobald, C. H. O'Donovan, Jas. A. Steuart, and D. I. McKew. Papers must be in the hands of the Corresponding Secretary by Feb. 1st.

MEDICAL NEWS.—The first number of the new Philadelphia weekly (a continuation of the *Medical News and Abstract*, published by H. C. Lea's Son & Co.) has made its appearance some two weeks in advance of the date which it bears. It is about the size of the English weeklies, and has the following departments: Original Lectures, Original Articles, Hospital Notes, Medical Progress, Editorial Articles, Reviews, Society Proceedings, New Inventions, Correspondence, News Items, and Notes and Queries. The original department of the first number contains contributions from Professors Flint, Agnew, Da Costa, Thomas and Conner.

SOCIETY BULLETIN.—*Clinical Society of Maryland* will meet Friday, January 6th, at 8 P. M. Dr. Latimer on "Croup;" Dr. Theobald on "Use of Constitutional Remedies in Ear Diseases." *Medical and Surgical Society* meets every Wednesday at 8.30 P. M. *Academy of Medicine* will meet Tuesday, January 3rd, at 8.30 P. M. *Medical Association* will meet on Monday, January 9th; annual banquet and election of officers. *Section on Obstetrics and Gynecology, Med. and Chi. Faculty*

will meet on Friday, January 30th, at 8.15 P. M. Dr. John Morris will open the discussion on the "Obstetric Forceps." *Sect. on Ophthalmology and Otolaryngology, Med. and Chi. Fac.*, will meet on Wednesday, January 4th, at 8 P. M.

MEDICAL ITEMS.

THE physicians of Copenhagen have held a meeting and passed resolutions approving the proposal to hold the next International Congress (1884) there. —Sir James Paget has been compelled by bad health to give up practice and go to the South of France. —Fothergill will have his fling at the *Brit. Medical Journal*. —The New York Society for the Relief of Widows and Orphans of Medical Men has assets amounting to \$135,000. —A man was recently fined \$100 in New York city for practicing without a diploma. —Dr. Roosa, of New York, refers to a case of maggots in a healthy ear as being unique; he will find a similar case reported in the *MARYLAND MEDICAL JOURNAL* of Dec. 1st. —Dr. Chiari, Prosecutor at the Rudolphshpitale, will fill *pro tempore* the Chair of Pathological Anatomy in the University of Vienna this winter. —Dr. Alan P. Smith has performed lithotomy 68 times, with but one death. The largest stone removed by him weighed between 3iij and 3iv. —The *Medical Annals* is the title of a very neat little journal issued by the Medical Society of Albany, N. Y. —Scarff's Fiction of Baltimore is receiving well-deserved censure. —Prof. Corradi Tommasi-Crudeli maintains that flower-pots may be a source of malarial infection. —Further experience has convinced Prof. Da Costa of the reliability of ergot in diabetes insipidus, although it is not infallible. —Harvard medical school has 243 students. —The *Materia Medica Society*, as well as the *Dermatological Society*, of New York, require candidates for membership to present theses.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

ON THE TREATMENT OF GONORRHOEAL OPHTHALMIA BY BALSAM COPAIVA.

BY I. BERMAN, M. D., BALTIMORE.

Blennorrhœa gonorrhœica is fortunately one of those affections of the eye with which we do not often meet, and although the different authorities in ophthalmology hold different views as to its prognosis, they are pretty much of like opinion regarding the prognosis, where affections of the cornea, leading to perforation, have already set in. They express themselves to this effect, that when blennorrhœa gonorrhœica is complicated with perforation of the cornea it generally results in total loss of sight. It has been my good fortune to succeed in curing two such cases, with complete preservation of vision. The treatment was somewhat original with me, and a short account of it may be of interest, particularly to those of our profession who have not the assistance of specialists at hand. As the second case was very similar to the first, ex-

cept that only one eye was involved, I will refer exclusively to the first of which I have kept a minute account.

Patient, L. M., a Russian, aged 25 years, was brought to the Infirmary, by a policeman, with his eyes in a disgusting condition. Chemosis in the highest degree of both conjunctivæ, and œdematous, almost stony hardness of the lids, made it impossible for me to ectropionize for the purpose of examination. One look at that part of the cornea which was visible, and the thick, purulent almost continuous discharge, were sufficient points for diagnosis. As often happens, among the lower classes, patient is unaware that he is the happy possessor of gonorrhœa, and denies it strenuously. A short inspection of course demonstrates it in optima forma.

The prognosis seemed to me very unfavorable in this case, as repeated examinations, as far as feasible, showed both corneae very much infiltrated, and the left threatening to perforate.

The therapeutics consisted in instillation of atropine, which produced complete mydriasis, and lessened the very acute pains considerably. After

washing both conjunctival sacs out with a three-quarter per cent. sulphate of zinc solution, I had, following the usual treatment, ice compresses applied during the night, the patient having been brought to me late in the evening.

At my early visit next morning I found this treatment had had no effect whatever; the infiltration of corneae had increased, while chemosis and œdema remained stationary.

I was in a dilemma. The infirmary was unprovided with nurses, if we except the colored cook, and here was *periculum in mora*. As immediate treatment of the gonorrhœa was strongly indicated, and injections under the circumstances were not admissible, and the danger of infection too great to allow others to go near the patient, I concluded to take the treatment upon myself.

I had seen very good results from the use of balsam copaiva for the purpose of restraining the secretion of the different mucous and serous membranes, and hoped to check the discharge both of conjunctiva and urethra by large doses of that medicament. I gave him, with my own hand, one large teaspoonful in water, three times a day, cleaned the conjunctival sacs out several times per diem, with the aforesaid sulphate of zinc solution, and made him wash his eyes frequently with a soft sponge dipped in cold water; at the same time ordering a strictly plain diet.

As I found him no worse next morning, and as the balsam copaiva was tolerated well, although he complained of loss of appetite and frequent evacuations, I decided to double the dose, relying on the endurance of the Russian stomach.

The local treatment remained the same, viz: instilling atropine pretty freely twice a day.

In a few days the hitherto copious discharge both from conjunctiva and urethra decreased in like degree, the

œdema had also almost entirely disappeared, and then the destruction of the corneae showed itself in perforations of both corneae, in the upper limbus.

Prolapsus iridis had fortunately been prevented by the timely and continuous instillation of atropine. The infiltration of the corneae had decreased, and I concluded to continue this treatment until every trace of secretion from urethra and conjunctiva had disappeared, especially since ectropionizing for the purpose of applying caustic to the retro-tarsal fold was out of the question, as I was unwilling to use pressure on the perforated eyeballs.

My reason for not using nitrate of silver in solution was that I wanted to keep the corneae clear from deposits of metallic silver in the parts deprived of epithelium.

The whole nourishment of the patient at that time was six teaspoonfuls of balsam copaiva a day, and milk *ad libitum*. He complained bitterly of his weak condition and loss of flesh, but was content when I told him that that was a necessary evil, the price he must pay to save his eyes.

As soon as feasible, that is about two weeks after he came, the upper lid was ectropionized, and the retro tarsal fold cauterized with lapis mitigatus, followed by neutralization with chloride of sodium solution. Meanwhile the corneae had begun to cicatrize, and after six weeks I was so fortunate as to be enabled to dismiss the patient with full vision in both eyes and only very inconsiderable anterior synechiæ where the perforations had taken place.

The second case took a very similar course, except that only one eye was affected, the other eye remaining free from infection by the timely use of a protecting bandage.

I had hesitated to publish a new treatment based on such slight experience, but material being, happily, somewhat rare, and loss of sight

through injudicious treatment very frequent, the case seems to deserve more consideration than it would under other circumstances.

A CASE IN WHICH VAGINA AND UTERUS ARE ABSENT.

BY R. H. P. ELLIS, M. D.

(Read before Balto. Med. Association, Dec. 27th).

Nature, although so true to herself, so accurate in the consummation of all her laws, and that to a degree of perfection unknown in human affairs and unequaled by finite artifice, does appear occasionally to drop a stitch, so to speak, in the formation of her greatest and grandest work—the human fabric. This fact seems to have been very strikingly evidenced in the case which I propose here to mention.

Mrs. T., aged 23 years, of medium size, and her general appearance indicating that she is possessed of physically sound constitution. She was married in November, 1879, up to which time she had enjoyed excellent health. In February, 1880, about three months after her marriage, she consulted me at her home for a pain in her back and soreness in the lower part of her abdomen.

Upon inquiry I ascertained that she had suffered in this way almost continuously since marriage, and that she had not menstruated since that event. My diagnostic conclusions were similar to those which I had arrived at in many other cases, under what I thought to have been like circumstances, namely, that the pain and nervousness complained of were most likely superinduced by the too frequent approach of her husband, and that said approaches had probably been productive of such a change in the physiological economy of her generative organs, as might very readily account for her post-marital amenorrhœa. I accordingly prescribed an anodyne, which gave her much relief, at the

same time explaining to her husband the necessity of moderation in all things.

The second part of my diagnosis in this case was erroneous as I found out later, for it happened about a week after my last visit that I was again called to see her suffering in the same manner as before. This time, however, I questioned her mother in some detail as to her daughter's condition, and learned from her, after some persistence, that her daughter had *never menstruated in her life*, although her health had been good up to the time of marriage. She had been treated by a physician prior to her marriage, as she said, to bring her sickness on, but all medication had been of no avail.

This acknowledgement of course caused me to suspect that all was not right. I thereupon insisted that an examination was absolutely necessary in order to decide upon an intelligent course of treatment. Owing to some sort of an unaccountable idea of false delicacy, both mother and daughter were very loath to acknowledge the fact that she, the daughter, had never menstruated.

When I urged the necessity of an examination, she at first objected, saying that her previous physician, a well-known practitioner of this city, had never advised such a procedure, but prescribed the bitter wine of iron, and assured her she would come all right. Tiring of its long use and failure to bring about the desired result, and being now married, she began to think that perhaps she was not just like other women, and so consulted me.

Upon examination I found first that she had no vagina, but that the perineal body extended in unbroken perfection from the rectum to the urethra, the latter appearing a little lower down than in the naturally formed female. The labia majora were moderately well formed; their

internal surfaces, however, were perfectly smooth, there being no lesser labia nor folds of mucous membrane. By passing the examining finger forward from the site of the perineal body proper, it encountered nothing on the smooth floor of the cul-de-sac formed by the rudimentary labia, until it reached the meatus urinarius, around which there was a very perceptible increase of muscular tissue and at that time some tenderness upon pressure, which showed to some extent the source of the discomfort complained of. Thus far my examination assured me that this was not a case of imperforate hymen but of congenital absence of the vagina. My next object was to ascertain whether there was any uterus present, and if so perhaps retained menses. After the most careful examination with finger in the rectum and a sound in the bladder, I was unable to detect the slightest evidence of the existence of such a body. I was convinced that there could not be any uterus present, and I knew there was no vagina, so I satisfied the inquiries of herself and husband by telling them they need not expect any offspring, and that her sickness would not appear, but that I did not think her health would be materially injured on account of either condition.

Being anxious to satisfy myself as to whether I could possibly have been at fault in my diagnosis, I had a well-known and experienced physician of this city to see and examine her with me the second time, and he entirely endorsed my diagnosis.

More than one year had passed when not long ago I was called to attend her for a mild attack of cystitis, and I expressed a wish to examine her again, telling her I wanted to ascertain if any change had been brought about in her condition, my real object being to learn whether intercourse was being carried on through the urethra into the bladder as in

cases I had seen reported. An examination established the fact, to my satisfaction, that such was the case, for my index finger was easily made to pass into the bladder, and that without any expression of discomfort upon her part. So easily indeed did it enter that I was almost in doubt as to whether it was the bladder until I made use of the catheter and withdrew some of its contents; this, of course, left no room for further skepticism.

Medical literature, so far as I have examined, gives us but comparatively few cases of this kind. Dr. Dogman, of Kars, Russia, reports a case of a young girl nineteen years old, without either womb or ovaries. Dr. Lawson Tait, however, in his work on "Diseases of Women," 1879, says the *entire absence* of the ovaries has been proved only in deformed fœtuses. Dr. Emmet, in his recent work on the "Principles and Practice of Gynecology," page 207, relates a case similar to that which came under my notice. He says: "I have placed on record a case of this description, where a young woman, after having been married several years without a menstrual show, consulted me for the latter difficulty. I found not the slightest evidence of a uterus nor trace of the vagina, but I discovered that connection had been carried on through the urethra into the bladder without either the husband or wife having suspected the true condition."

When I reflect upon a case of this kind I am convinced of the fact that a mother is guilty of a sin of serious omission when she allows her daughter to marry without having previously menstruated, or been pronounced fit for such a state by a competent physician. As the husband and wife in the case of which I have spoken seemed satisfied with each other, I did not deem it best to inform them of the complete nature of affairs, lest

I should excite a cause for divorce. I have thought as in some other things, that "where ignorance is bliss 'tis folly to be wise."

REPORT OF THE SPECIAL COMMITTEE OF THE AMERICAN PUBLIC HEALTH ASSOCIATION ON THE PREVENTION OF VENEREAL DISEASES.

Made on behalf of the Committee by JOHN MORRIS, M. D., of Baltimore, at the late meeting of the Association in Savannah.*

The report of the Special Committee made to the Association at New Orleans last year was chiefly devoted to a detail of the sufferings brought on society and the evils brought to the State by the unchecked spread of venereal poison throughout our vast country. Some suggestions were made in a general way as to the proper means to arrest this great scourge but no definite plan was suggested looking to legislation on the subject by the different States or general government. It has been the labor of the committee since that time to devise and frame such enactments as would secure the end proposed, and at the same time meet with popular favor and acceptance. This has not been an easy task. The subject is a delicate and trying one, and great difficulties beset all efforts to bring it to the knowledge of the people and particularly of those who are engaged in making our laws. It is proposed, however, in the coming winter to submit to a few of the Legislatures of the States bills of a proper character which it is hoped will be passed by these bodies. This will be a tentative measure, and will, even if not

successful, serve to bring the whole matter before the people of the country and be a means of enlightening them in regard to the great evils with which they are surrounded.

Your committee have been greatly encouraged in the prosecution of their labors by the evidence furnished by the late select committee of the British Parliament appointed to examine into the workings of the Contagious Diseases Act of Great Britain. This testimony shows conclusively the great advantage to society to be derived from the operations of legal enactments on this subject. From the evidence of many gentlemen, including clergymen of the highest standing, it has been shown that not only has disease been greatly lessened, but a very decided moral improvement has been brought about in the lives of those subject to the operation of the law.

Your committee have been restricted in the preparation of a law by the character of the resolution adopted at the last meeting, as well as by the spirit of the discussion which took place on that occasion. They have, therefore, confined themselves in the preparation of a Legislative Act to the exact wording of that resolution.

Respectfully submitted,

A. L. GIBON, M. D.,
J. M. KELLER, M. D.,
GEO. N. STERNBERG, M. D.,
D. C. HOLLIDAY, M. D.,
PRESTON H. BAILHACHE, M. D.,
JOHN MORRIS, M. D.,
Committee.

AN ACT

ENTITLED AN ACT TO PREVENT THE SPREAD OF CONTAGIOUS DISEASES.

ARTICLE I.—Be it enacted, by the General Assembly of Maryland, That any person who shall knowingly communicate, or be instrumental in communicating by any direct or indirect means, a contagious disease, such as small pox,

*Dr. Morris also made an independent report, embodying a more comprehensive law, looking to the repression of prostitution and the gradual extinction of venereal diseases by legal means. We will publish this report, also, in the next number of the MARYLAND MEDICAL JOURNAL.—EDS.

scarlet fever, or venereal disease, shall be deemed guilty of a misdemeanor, and shall be subject, upon conviction in any of the Circuit Courts of the Counties of this State, or in the Criminal Court of the City of Baltimore, to a punishment of six months imprisonment in the House of Correction of the State of Maryland.

ARTICLE II.—Be it further enacted, That if any person being the owner or occupier of any house, room, or place, within the limits of this State, having reasonable cause to believe any person to be affected with a contagious disease, induces or suffers such person to remain, or to be in that house, room, or place, shall be deemed guilty of a misdemeanor, and, on summary conviction in one of the Circuit Courts of this State, or in the Criminal Court of the City of Baltimore, shall be liable to a penalty not exceeding one hundred dollars, or, at the discretion of the Judges of the Circuit Courts of the State, or of the Judge of the said Criminal Court, be imprisoned in the County Jail of the County in which conviction takes place, or in the Baltimore City Jail, for any term not exceeding six months.

ARTICLE III.—And be it further enacted, That the State Board of Health, with the approval of the Governor, and the Health Board of the City of Baltimore, with the approval of the Mayor, shall have power to remove to an hospital, or hospitals, all persons suffering from contagious diseases, who, from failure to take proper precautions, imperil the health of the community.

ARTICLE IV.—And be it further enacted, That this Act shall go into effect on the first day of June, eighteen hundred and eighty-two.

ABSCESS FROM THE HYPODERMIC SYRINGE.—According to Dr. H. H. Kane, the causes of abscess from the subcutaneous injection of morphia are (a) impure solution and dirty syringe or needle, (b) improper manner of making the injection, (c) poor general condition of the patient.—*N. E. Med. Monthly.*

CLINICAL LECTURE.

A CASE OF COLOTOMY FOR EPITHELIOMA OF THE RECTUM.

BY OSCAR J. COSKERY, M. D.,
Professor of Surgery, College of Physicians and Surgeons.

(Delivered December 16th, 1881.)

Gentlemen:

The operation you have just seen me perform is that known in surgery as Colotomy. This means the opening of the colon in some part of its course, the bringing of the opened portion to the surface, and by stitching it there, the formation of an artificial anus. Leaving out the earlier methods, suffice it to refer to those of Callisin, who made a longitudinal incision over the descending colon, of Amussat, who made a transverse cut in the right lumbar region, and of the latter modified by Baudens and Bryant. The modifications of these later operators consisted in transporting the operation to the left side, and in making the incision oblique, or in the line of the last rib.

The occasions for performing the operation have probably far exceeded the original expectations of the first author quoted; and it is now employed for any obstruction to defecation not remediable by medical means, and to those horrible cases in which, an opening has been made in any way between the rectum and bladder. The present case was, as you saw, for epithelioma of the lower portion of the rectum, in which the pain and hemorrhage produced by the passage of the fecal matter were exhausting the patient.

Let us now describe the case, the mode of operation and the probable results.

The history is that some three years ago this gentleman, 36 years of age, had some difficulty in defecation, as pain and slight bleeding, which he, as the laity almost always do, referred to piles. He had nothing done and

the trouble steadily increased. When I first saw him, some months since, there was, as you saw to-day, a large, irregularly ulcerated surface occupying the site of the anus, and extending into the buttocks. As far as the finger could be passed up the rectum, a hard, knobby mass, bleeding freely, was felt. The diagnosis of epithelioma of the anus and rectum was made. For certain reasons an operation was not thought to be then advisable and the patient was put upon constitutional treatment. He came before us to-day for operation, showing an increase in the amount of the ulceration and enlarged glands in the groins.

The operation, as you saw, was done as follows: Complete anæsthesia having been produced, the patient was turned upon his right side and a pillow placed below his right loin. This was in order to partly render tense the left loin, but did not amount to much. Following Mr. Allingham's instructions the anterior and posterior superior spines of the left *os innominatum* were then made out. A line drawn longitudinally with the long axis of the body, and midway between these spines, was made with the pencil. Now, according to the author quoted, the centre of the descending colon should be one-half inch back of and parallel with this first line. Keeping this in mind, an incision was commenced three-quarters of an inch below last rib, and two inches behind the second line and running obliquely downwards and forward four inches. This incision, it was supposed, would have the descending colon below its centre. After some difficulty, on account of the collapsed state of the gut, the colon was found and drawn to the surface. A needle, threaded, was passed from below, upwards and forwards, first through the skin alone of the incision, then through the intestine, and lastly through the skin of the upper edge of the incision. Another needle was passed from be-

low *upwards* and backwards crossing the first at nearly right angles. These strings were left long, and a linear cut being made in the gut about three-quarters of an inch in length the strings were hooked out of the gut, the ends cut and so tied as to have the intestine connected with the skin at four points. It was found necessary to insert two more sutures in order to keep the gut fairly open, and the balance of the wound was closed with pins.

As to the prognosis. So far as the patient is immediately concerned, he will do well. I mean that he will recover well from the operation, and the formation of an artificial anus will be a success, I think. So far as the epithelioma is concerned, the pain and bleeding, caused by the passage of fæcal matter over the ulcerated surfaces, will cease, because all, or nearly all, will now pass through the newly-made opening—perhaps even the rapidity of the ulcerative process will be arrested. But of course an operation at one point will not cure disease in another. Life, however, will certainly be prolonged and made happier by what we have done. The prognosis, that far, is good.

In reference to the after treatment, all that we can do is to keep the patient as clean as possible by frequent dressings, and let nature alone to heal the wound.

ADDITIONAL REMARKS MADE AT THE CLINIC ON FRIDAY, JAN. 6TH, 1882.

Gentlemen:

You probably recognize the patient who has just walked into the amphitheatre. It is the one upon whom we operated for epithelioma three weeks ago to-day. As you saw then, the dressing was of the simplest character: a piece of perforated greased rag and plenty of tow loosely applied. This was continued for over a week, with small doses of quinia and opium in-

ternally. Notwithstanding the large amount of fat and cellular tissue removed from around the kidney, and the great exposure of kidney substance during the operation, the patient never had a temperature above $98.7-10^{\circ}$, was walking about his room on the tenth day, and left the hospital seven days afterwards. Since the gut was opened not a particle of fæcal matter has escaped through the epitheliomatous anus; there has been no bleeding and no pain; although very profuse stools have occurred through the artificial anus from within twelve hours after the operation was formed.

The appearance of the cancerous mass is distinctly improved. This is due to the absence of irritation from passing fæcal matter. We now apply over the new opening in the colon a piece of lint and a pad of tow, keeping them in position by a tight bandage to prevent continuous escape of stools. As you see, on removal of this dressing, no soiling, of any moment, has taken place, and the original wound, four inches in length, has united except where the gut has been stitched to the skin. There is no prolapsus, and the patient's general condition is improved.

Now what has been gained by the operation? Relief from persistent pain, relief from bleeding, an absence of increase in the size of the malignant growth, and the patient has been restored to the companionship of his fellows, the former constant and irresistible passage of fæcal matter having rendered him absolutely *hors de societe*.

SOCIETY REPORTS.

BALTIMORE MEDICAL ASSOCIATION.

STATED MEETING HELD NOV. 28, 1881.

(Specially Reported for the *Maryland Medical Journal*).

Jos. T. SMITH, Vice-President, in the Chair.

DIPHTHERIA: ITS DIAGNOSIS AND TREATMENT.—*Dr. Perkins* read a paper with this title. He maintained the non-identity of diphtheria and croup and asserted that not more than one-tenth of the cases reported as diphtheria were genuine.

Dr. Friedenwald saw no reason for excluding cases on account of their mildness. There are variations in severity in this disease as in others. He believed the two diseases were distinct; else, why is it that we never see cases of true croup followed by paralysis?

Dr. Frank related a typical case of diphtheritic conjunctivitis in an infant, æt. 6 months. Everting the lid disclosed the false membrane. There was no purulent discharge. Two children in the family had had diphtheria previously, and a third was attacked whilst he was attending the baby. As soon as the membrane was wiped away it reformed. The attack was very severe, but the child recovered with only a leukoma of the lower half of the cornea. The treatment was dusting the conjunctiva with flowers of sulphur—a method followed in Vienna. The infant had been kissed by one of the other children having the disease. It was in an exceedingly unfavorable condition, being affected also with acute eczema and summer diarrhœa.

Dr. Cordell had been taught the non-identity of croup and diphtheria, but had had his faith much shaken by one or two cases, as the following: A child, æt. $3\frac{1}{2}$, was attacked with well-marked symptoms of croup. Dyspnœa became extreme, and tracheotomy was performed, but death followed two hours afterwards from an excessive accumulation of liquid secretion in the air passages. One of the best diagnosticians in Baltimore pronounced this an undoubted case of croup. The child was not seriously ill more than twenty-four hours and at no time was a membrane visi-

ble in the throat. A lady living next door, who rendered assistance in the room during and after life, was immediately attacked with fever, sore throat and ashy patches on the tonsils and her disease was undoubtedly a mild diphtheritis. After the death of the child, another child of the same family was attacked with a slow and lingering form of disease, characterized by coryza, discharge of a thin and irritating fluid from the nostrils, subacute pharyngitis, frequent and profuse epistaxis and sweatings, emaciation, anorexia and jaundice—lasting for several weeks. The cause of these cases was clearly traced to an overflow of the privy-vault and the consequent entrance of sewer-gas into the room occupied by the children. Another case might be related where a child with well-marked symptoms of true croup, without membrane in the fauces, died suddenly of paralysis of the heart. This, with manifest hygienic defects about the house, and other sickness subsequently in the family, proved very clearly that the case was diphtheritic. Both of the above cases were in the highest degree typical of true croup

STATED MEETING HELD DEC. 12TH.

JAMES A. STEUART, M.D., President, in the Chair, and 16 members in attendance.

After the dispatch of routine business, *Dr. Tanevhill* asked for the views of members present as to the best method of treating CHLOROFORM SYSCOPE.

He had learned during the war that slapping the region of the heart with a towel wrung out of hot water, was an efficient measure, and employed it with success very recently in a case in which, after amputation of the toe, the patient became blanched, her pulse feeble and respiration ceased. He always carried with him, when about to use an anæsthetic, some spirits of ammonia.

Dr. Joseph T. Smith had seen two cases resuscitated by elevating the feet, letting the head hang down over the side of the bed, and slapping the chest. Much of the trouble comes from not having made the proper arrangements beforehand. In one instance, it was found impossible to raise the window for some time; as soon as it could be gotten up and fresh air admitted the patient revived. The battery, too, which might be of use, is rarely accessible in these cases.

Dr. Ashby regarded chloroform as the best anæsthetic and predicted that the opposition to it would die out; already evidences of a change of sentiment are visible. He laid stress upon the importance of fresh air, and drawing the tongue forward.

Dr. Frank has always felt the absolute necessity of having a tongue forceps at hand since 1877, when he met with a case requiring enucleation of the eye-ball. For two days the patient, in anticipation of the operation, had eaten nothing (this was an error; the operation should have been done as soon as decided on). During the anæsthesia her face grew dark, and breathing ceased; there was no means of drawing the tongue forward; but fortunately resuscitation was effected by opening the window and dashing cold water upon the patient. He also invariably uses whiskey before anæsthesia.

Dr. Uhler pointed out the fact that the s. g. of chloroform vapor is greater than that of atmospheric air, and hence by letting the head hang in a prone position the gravity of the chloroform will cause it to pass out of the lungs and air passages. By *postural* treatment we can use chloroform in any operation whatever. A battery should always be carried along when anæsthetics are to be used. He had never seen a death from chloroform, although witnessing its administration an enormous number of times. In some cases bad results had followed

its administration in the hands of hospital stewards during the war, but they were referable to carelessness entirely. He referred to a portable nitrous oxide apparatus in use in this city for administering that anæsthetic as surgeons might desire at the patients' houses.

Dr. Ellis urged carefulness in the first administration for fear the patient might possess the dreaded susceptibility.

Dr. Sellman said the nausea was due to not giving the agent freely enough, and said the best way to avoid it was to "overwhelm" the patient with it at once.

Dr. Taneyhill protested against this mode of administration and thought the best way to obviate nausea was to have an empty stomach.

ALBUMINURIC RETINITIS.—*Dr. Frank* then opened this, the regular subject of discussion, by reading a paper. He reported the following case: Mr. R., æt. 24, consulted him October 8th, 1875. He had been suffering for the previous eight months with headaches, which no treatment had entirely relieved. He had crossed the ocean upon the advice of his physician, but returned unimproved. About one week previous to his visit he noticed flashes of light and dimness of vision, which induced his physician to send him to Dr. F. for an opinion. On examination—in the right eye vision was 20-20, and patient could read Jaeger No. 1 (both with an effort); in the left eye, vision was 20-40 and could read J. No. 2— with + 1-36 sph. V was 20-40 and could read J. No. 1. Ophthalmoscopic examination showed retinitis albuminurica (typically marked with the peculiar dottings at macula lutea right eye. In the left eye the peculiar dotting was not so well marked, but there were more hemorrhagic spots, and optic disk more involved). The urine was found upon examination more than half albumen with

tube casts. The patient being too anæmic to stand any loss of blood, dry cups were applied to the temples, and dark glasses ordered with rest to the eyes. Internal treatment (iron, &c.) was carried on at the same time by the family physician. October 15th right eye about the same, but left had run down to 20-200, with an increased number of hemorrhagic spots to be seen. November 17th (the last time patient was seen) right eye V 20-70, left V 20-50; the field of both eyes incomplete. He died December 4th, 1875, having been, according to the information obtained, totally blind for some days before his death. In this case it was the ophthalmoscope that cleared up the mystery and showed where the root of the evil was to be found.

TUBERCULOSIS.—*Dr. Cordell* read a translation with this title, of an article by Prof. Rindfleisch, published in *Virchow's Archiv*. (This was published in the last two numbers of this JOURNAL).

STATED MEETING HELD DEC. 27TH, 1881.

JAMES A. STEUART, M. D., President, in the Chair.

The association met at the medical hall, at 8.20 P. M., the President in the Chair, and with a full attendance of members.

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PROFUSE HEMORRHAGES DURING PREGNANCY.—*Dr. Gibbons* reported that the patient, of whom he had spoken at a previous meeting as suffering from profuse and obstinate hemorrhages, had miscarried in spite of all his efforts. There was no apparent cause for the accident, and the patient had never had any pain.

Dr. Monmonier had a case under care who had suffered from intermittent hemorrhages with occasional pain. He had succeeded, however, in bringing her safely nearly to term by confinement to bed and use of iron.

PECULIAR PARALYSES FOLLOWING DIPHThERIA.—*Dr. Kemp* reported the case of an infant four months old, of a family in which two other children had had diphtheria, who had ptosis, but no difficulty in suckling or other symptoms of diphtheria. In view of the rarity of this affection and absence of apparent cause, it had suggested itself that it might be due to a diphtheritic influence.

Dr. Gibbons had had a child under his care in whom strabismus was the only sequel of a severe attack of diphtheria.

SCARLET RASH AFTER VACCINATION. *Dr. Gibbons* also reported a case in which a scarlet rash appeared after vaccination. *Drs. Ellis* and *Smith* had met with similar cases.

ABSENCE OF VAGINA AND UTERUS AND OTHER SEXUAL ABNORMALITIES. *Dr. Ellis* then opened the regular discussion by reading the report of a case of "Congenital Absence of Uterus and Vagina."

Dr. Ashby referred to a case in which there was no uterus; the ovaries were present. The lady had been married for several years and was well formed and handsome, with perfectly developed breasts. She was not aware of her deformity. The vagina was represented by a cul-de-sac about $1\frac{1}{2}$ inch long.

Dr. Browne referred to two cases in which post-mortems had been obtained. The first, reported by the late Prof. Thos. R. Brown had a mere cord in place of a vagina. The rudimentary representation of a uterus was discovered with the aid of the microscope. She had had the menstrual molimen regularly and vicarious menstruation. She was married—intercourse taking place through the urethra. The second case occurred in the practice of *Dr. Peaslee*, who exhibited the specimens before a medical society. *Batley's* operation was performed in this case. A few mus-

cular fibres were found representing one horn of the uterus.

Dr. Monmonier had had a case also of congenital atresia, not discovered until after marriage. The breasts were perfectly flat. Coition could not be affected, and the result was separation and divorce.

Dr. Steuart referred to two cases of atresia—one in a colored woman at the Almshouse, in whom, at her own most urgent solicitation, an attempt was made to open a passage to the uterus. It was a most bloody operation, but was not successful. In another similar case a lady went to Edinburgh, was there operated on, and died in consequence.

Dr. Price related the following: A beautiful young lady, in a family whom he attended, became the object of the affections of a gentleman; his attentions were discountenanced by the parents, who were aware of her sexual malformation. The suitor being importunate *Dr. P.* was requested to make an examination with a view to informing the gentleman of her actual condition. He found a rudimentary penis, about one inch in length and the size of a goose-quill, through which she urinated. Beneath this little teat in the situation of the vulva there was no depression, nor even any sign of mucous membrane, the parts being smooth and covered with skin. The breasts were well-developed; the voice that of female—she sang beautifully. There were no testicles. There was evidence of the possession of erotic feeling. The mons veneris was well-formed. *Dr. P.* informed the suitor of the result of the examination; he was nearly heart-broken by the news and gave up business and moved away.

Dr. Johnston reported the following: He had been asked by the late Prof. E. Lloyd Howard, to see a case of apparently a young man, aged about 19. He had an effeminate look and

weak voice and was dressed as a boy. This individual had come to learn his sex. A thorough examination was accordingly made. The *mons veneris* was distinct and covered with hair. There were apparent corpora cavernosa, and underneath these an apperture which communicated with the bladder. Under the aperture was a short cul-de sac. No uterus was detectible. In each groin there was a gland-like body, believed to be a testicle. The conclusion arrived at was that the individual was a male, and the explanation of the appearances found was traced in abnormalities of foetal development. Early in foetal life the sex cannot be determined—the clitoris and penis being alike. If the two sacs holding the testicles remain separate, these organs may or may not descend. The spongy portion of the urethra and glans penis were absent in the case cited. The cul-de-sac might have been an excessively developed utriculus. This individual had passed for a girl up to the age of 18—associating constantly with them and even sleeping with them. He even had long hair. At the age specified a thin beard began to show itself, when he cut off his hair and assumed the male attire. He had gone previously by the name of *Ann*; hence, to avoid unpleasant surprises, and at the doctor's suggestion he was baptized by the name of *André*.

MOVEMENT TOWARDS INCORPORATION.—Under the head of miscellaneous business, attention was called to the fact that although the oldest of the local medical societies of Baltimore, the association had never yet been incorporated. In this respect it was true she was no worse off than her sister societies—one of whom was, however, at last making a move in this direction. A resolution was accordingly offered and adopted appointing a committee to report at the second meeting in January upon the

expediency and expense of having the association incorporated under the laws of the State.

EDITORIAL.

EXTIRPATION OF THE UTERUS FOR CANCER.—Whatever doubts might have been entertained as to the justifiability of removing the uterus for malignant disease are now set at rest by the successful removal of the cancerous gravid uterus by Mr. Spencer Wells. The patient upon whom this operation was performed is now pronounced cured, and the operation will take its place in history as one of the most noted triumphs which surgery has witnessed. This successful case, which Mr. Wells has brought forward to establish the propriety of the removal of the uterus for malignant disease, has aroused an animated discussion in England, and has drawn attention to a subject of greater interest, and of equal, if not greater importance than ovariectomy. Until the results of Mr. Wells' case were known American Gynecologists had given but little attention to an operation which apparently promised so little and consequently it had made no headway, had aroused no enthusiasm and had not fully received the sanction of professional judgment. However, in Europe where the operation has been performed a large number of times, and where statistics may be shown to justify its employment, even before the successful operation by Mr. Wells, it had aroused decided interest and enthusiasm among its advocates. This was especially the case on the Continent where Freund first gave an impetus to the operation by the introduction of his method. This method, which differs from that of Mr. Wells in some important respects, he advocated with great enthusiasm and zeal. Whilst Freund's operation has not fulfilled all the requirements of sound practice, to him is due the credit of inviting professional study and inquiry in a direction which has no doubt led to the recent triumph of Mr. Wells in England. Freund's results were anything else but satisfactory. His mortality was not only large in his own practice but has ranged from 70 to 90 per cent. in the practice of

those surgeons who employed his method. It is claimed that his operation is not only difficult, but objectionable from the fact that it requires a long time to do it; that hemorrhage is severe; that there is danger of wounding the bladder, rectum and urethra, and that the long continued manipulation and exposure of the intestines is injurious to these parts.

It has been asserted that Freund's operation falls short of a legitimate surgical resource, and its employment has been regarded as of doubtful propriety. This is the estimate placed upon it by many leading authorities, and it is not a matter of surprise that such men as Schroeder, Czerny, Credé and others, should discard the operation, save in very exceptional cases, or propose such modifications as give promise of better results.

Billroth, Schroeder and other well-known operators, having lost confidence in the abdominal method, advocated by Freund, now almost exclusively operate per vaginam. It is claimed that the advantages of this method over the abdominal method are very decided. The danger of wounding the bladder, urethra and rectum is diminished, the intestines are not exposed to the air or to manipulations, the peritoneum is subjected to less mutilation, drainage is more perfect, shock and hemorrhage less severe and the mortality not so alarming.

The operation performed by Mr. Wells was a modification of Freund's and Porro's operations. The uterus was removed by abdominal section, and the details were similar to those practiced by Freund. Freund removed the non-gravid uterus, and Mr. Wells a uterus containing a foetus at the sixth month. The operation differed from Porro's in this particular: the whole of the uterus was removed, whereas in Porro's the cervix is not. Mr. Wells surmounted difficulties greater than those met with by Freund or Porro or any other operator. His success is therefore more complete and unique. It marks a triumph for abdominal surgery and the abdominal method as warmly advocated by Freund. Of these two methods of operating, both may still be regarded as on trial, for the best authori-

ties are still discussing the results secured by each, and have not agreed as to whether these results have equalled the risks assumed. Such statistics as have been published are for the most part incomplete, and do not show whether the operation itself has been the cause of death or whether death resulted from a return of the disease. The mortality has been shown to be larger by the abdominal than by the vaginal section. A more careful study of the methods of operating is needed. Such modifications must be adopted as will place the operation upon a more favorable footing and lead to its general recognition as a legitimate surgical procedure. Greater care must be exercised in selecting the cases presented for operation, and operative measures should be instituted before the disease has advanced so far as to debilitate the patient or to invade the tissues surrounding the uterus. When the location of the disease has been determined, whether confined to the body or to the cervix, or involving both, the necessary measures for its removal should be promptly instituted, provided it has not involved neighboring organs or tissues. A diagnosis having been determined upon, the surgeon is then in a position to advise the risk of an operation and to determine the special method to be employed. In the light of modern abdominal surgery the surgeon cannot safely reject the experience and example of those who have demonstrated the justifiability of operative methods.

The far reaching benefits which are likely to result from the adoption of improved methods of removing the uterus invaded by malignant disease are comparable to the lasting good which has come from the use of other operations as apparently hopeless and unjustifiable in their inception and early practice as the one under consideration. When it is remembered that some years elapsed before ovariectomy was regarded by the profession as justifiable, and that it has secured its position in surgery through the irrepressible labors and genius of its advocates it is not too much to expect for the operation of extirpation of the uterus a final triumph. The recent successes in abdominal surgery and the rapidly de-

veloping surgical resources in every field will assuredly justify the careful practice of any operation which offers even temporary relief to a large class of patients.

To one who has studied the statistics of uterine cancer it is apparent that there is a wide range for the adoption and employment of operative measures looking to the eradication of a disease which annually destroys a large number of valuable lives. Study and experiment may possibly determine whether cancer can be cured. European surgeons are busily working out this problem, and it now remains for the profession on this side of the Atlantic to say whether they will yield to them this fruitful field of research or join hand in hand and work out Freund's idea that cancer of the uterus can be cured by operative procedure.

CONCOURS OF THE RED CROSS.—We have received a communication from the International Committee of the Red Cross at Geneva, in which the announcement is made that a "concourse" will be held for the discussion of the important subject of the improvising of means for the relief of sick and wounded soldiers in service in the field. Three divisions of this subject are proposed, viz: the improvising of (a) means of treatment, (b) means of transport, (c) of an ambulance or field hospital. The first will embrace such subjects as the use of hemostatics, fracture apparatus, refrigerants, the employment of Listerism on the field of battle, utensils, linen, clothing, products of the soil so far as they can be utilized, &c. The second division is upon reflection, sufficiently suggestive. Under the third division would have to be considered the location of the temporary hospital, the appropriation or construction of a building, the organization and management of the service, the furniture, the food, &c. For each of the three subjects proposed a first prize of 2,000 francs (\$400), and second prizes of 500 francs (\$100) will be decreed. The memoirs submitted in competition for these prizes may be written in French, German or English, and they will be subjected to the examination of a jury composed of representatives of different nations. Each me-

moir must bear a device, which is to be repeated upon a sealed envelope containing the name and address of the author, and must be forwarded to the "Président du Comité International de la Croix Rouge, Rue de l'Athénée, 8, a Genève (Suisse)" before the 1st of April, 1883.

We comply cheerfully with the request to give the above notice the publicity of our JOURNAL, and commend it most heartily to those who are capable of throwing light upon the subjects proposed, not simply because of the rich prize or prizes offered (for the same person may take all three), but on account of the great practical good to the human race, not only in military but also in civil life, from the special study of these important questions.

THE SANITARY INSPECTORS AND THEIR RELATIONS TO THE PROFESSION.—The energy and zeal of the health authorities of Baltimore are well-known and we hope duly appreciated both by the profession and public. We have already had occasion to ascribe to them the credit of having cut short a threatened epidemic of small-pox, and the indications point to the likelihood of a similar happy issue of the present outbreak of that disease. We desire always to extend to them our heartiest support, and it would be our last thought to interpose any obstacle in the way of their freest legitimate activity. But at the same time we cannot overlook the fact that abuses may arise from the over-zealous action of individuals entrusted with the public health interests which may demand censure and even resistance if they be persisted in. That such abuses have arisen is apparent from a statement made by a member at the last meeting of the Academy of Medicine. The facts as stated were these: The gentleman in question, a physician of high standing and acknowledged ability, was attending a child who was affected with an eruption, which he had diagnosed and pronounced to be non-variolous. Notwithstanding this it was hinted abroad that there was a case of small-pox in the house, and on visiting the patient shortly after, the physician found that an inspector had already been there,

had pronounced the case one of undoubted varioloid (because "it was exactly like one he had seen some days before of that disease"), had ordered that the building should be disinfected, and the child be removed to the pest hospital, or, should this be refused, that a yellow flag should be hung from the window. The physician expostulated with the inspector, who was not a medically educated person, and could with difficulty get him to postpone the execution of his orders until his opinion as to the nature of the disease could be confirmed. Availing himself of the short respite thus with difficulty obtained, he went at once for the Health Commissioner, Dr. Steuart, who, upon seeing the patient, corroborated his view, and of course stayed further proceedings.

Whether any action was taken in regard to the officious inspector we have not learned, but it would seem strange if one so ignorant of his duties, so overbearing and presumptuous, should be allowed to retain his position. At any rate we have faith enough in the discretion and judgment of our able Health Commissioner to believe that, the matter having been brought to his attention, such measures will be adopted as will forestall a repetition of the very unpleasant occurrence to which we have alluded.

In this connection we may mention that it has been stated by good authority that several persons have been recently sent to the pest hospital for supposed small-pox, who were found not to have that disease, but whether by the same inspector or not we cannot say. If, however, ignorant persons without medical knowledge or experience are allowed to make the diagnosis such mistakes are to be expected and inevitable.

STATE REGISTRATION LAWS—From what we can gather from our contemporaries, the laws that have recently been passed in several of the states, with regard to the registration of physicians are calculated to work injuriously to the interests of medical schools of other states, and it is well for the authorities in our own schools to look into the matter. In Pennsylvania, and we believe in New York for instance, practitioners not

graduates of schools within the limits of those states are required before they can register to submit their diplomas to the faculty of some school within the state in which they reside and even to undergo examination upon their proficiency—should the said faculty see fit to require it—after which with a certificate of approval they are allowed to register. It is quite evident that the time, trouble and expense involved in this procedure will have the effect of deterring students from those states from attending schools elsewhere, and it is worthy of consideration whether, if there be no other resource at hand, we had not better protect our own interests by the passage of a similar law in Maryland.

PRACTICAL INSTRUCTION IN ANATOMY AND OPERATIVE SURGERY.—Dr. Randolph Winslow, of this city, has organized, in connection with the anatomical rooms of the University of Maryland, a private course of instruction in anatomy and operative surgery, which offers fine advantages to recent graduates and practitioners to continue or renew their anatomical studies. The course is open from October 1st to May 1st, but after the close of the present course at the University, about March 1st, a special course of instruction will be inaugurated with the expressed purpose of giving additional advantages to recent graduates. An abundance of anatomical material will be secured, and those who wish to dissect or practice in operative surgery will have the best opportunities for doing it.

A knowledge of anatomy is not as well appreciated by the medical student or practitioner as it should be. During the attendance upon lectures this branch is often crowded out of the course and the majority of graduates possess only a book knowledge of the subject, which has been crammed for the "green room" and soon leaves the mind after the examinations are over.

Anatomy is soon forgotten by the best of memories unless the mind is frequently refreshed by anatomical work. Every practitioner must recognize this fact, and at times feel the want of fresh anatomical knowledge. Dr Winslow's course fills a need in this particular, and

it is believed the profession will be prompt to take advantage of an opportunity for practical work in the anatomical rooms.

REVIEWS & BOOK NOTICES.

The Applied Anatomy of the Nervous System, being a Study of this Portion of the Human Body from a Stand-point of its General Interest and Practical Utility, Designed for Use as a Text-Book and a work of Reference. By AMBROSE L. RANNEY, A. M., M. D., N. Y., D. Appleton & Co., 1881. 8 vo. pp. 500.

Many of our readers will doubtless, like ourselves, have experienced the difficulty of comprehending a number of the terms used in late articles and treatises on the nervous system. Such rapid strides has this important department of medicine taken that it has left many of us in the lurch. It is the aim of this book to meet the wants here referred to, and the work could not have fallen into more competent hands than those of Prof. Ranney. This large octavo volume, which is entirely devoted to the anatomy of the nervous system, is, with few alterations, a course of lectures delivered in the University of New York, last winter. The colloquial style has been retained as possessing advantages of force and clearness over even one of higher theoretical excellence. The illustrations, numbering 179, are derived mainly from leading authorities, as Rosenthal, Hirschfeld, Sappey, Hammond, Ferrier, etc., whilst the author contributes a number of diagrams. We are acquainted with no recent work which deals with the subject so thoroughly as this; hence, it should commend itself to a large class of persons, not merely specialists but those who aspire to keep posted in all important advances in the science and art of medicine.

A System of Surgery Theoretical and Practical. Edited by T. HOLMES, M. A., Cantab; Revised by JOHN H. PACKARD, A. M., M. D., and others. Vol. II. Phila., H. C. Lea's Son & Co., 1881. 8 vo. pp. 1063.

The first volume of this great work was noticed by us some months ago. Vol. II is devoted to "Diseases of Organs of Special Sense, Diseases of Circulatory System, Diseases of Digestive Tract, and Diseases of Genito-Urinary Organs." The following are the American revisers of this volume. Drs. Geo. C. Harlan, C. H. Burnett, J. S. Cohen, Charles McBurney, Lewis A. Stimson, Samuel C. Busey, J. Wm. White, James Truman, J. H. C. Simes, John H. Packard, E. L. Keyes, and A. J. C. Skeene. The same care and painstaking in revision is manifested in this as in the former volume and the work will constitute when completed, by all odds the greatest surgery yet published.

The Nurse and Mother. A Manual for the Guidance of Monthly Nurses and Mothers. By WALTER COLES, M. D., Member of the St. Louis Obstetrical and Gynæcological Society. J. H. Chambers & Co., St. Louis, Mo., 1881.

This is a manual for the guidance of monthly nurses and mothers. It gives instructions in regard to pregnancy and preparation for child birth, with minute directions as to care during confinement, and for the management and feeding of infants.

The *Introductory* discusses the general qualifications and acquirements of nurses and the care which should be exercised in their selection. The author says: "To fulfill these offices efficiently and acceptably, requires a combination of intelligence and virtue, of which no true woman need feel ashamed. Indeed the time has come in the progress of refinement and civilization, when the nurse, especially

the lying-in or monthly nurse, is expected to possess a certain amount of intelligence and special training, fitting her for the responsible duties of her vocation. The effect of this will be to banish from the sick room with the present generation, much of the ignorance and superstition which have hitherto been patronized by the public and tolerated by physicians."

The importance of this subject has not been over-estimated by the author. The choice of an intelligent nurse is a question which often perplexes the physician. There are at the present day few women who combine the necessary experience and training for the intelligent management of the sick room. The vast majority of those engaged in the duties of nursing have enjoyed no course of systematic training, and the knowledge they possess is often limited, empirical and unreliable. The average midwife or nurse is more or less influenced by superstitions and traditions of medicine and is utterly unreliable in many of the requirements of the lying-in or sick room.

There are few practitioners who have not witnessed the errors of ignorant and incompetent nursing, and who have not felt the need of well-trained assistants.

The author of this book has done a good work in preparing such a clear and practical treatise for the use of nurses. His object has been "to elevate the nurse by imparting satisfactory information concerning all that is essential for her to know and to do in her capacity as such." The work does not aim to prepare the nurse for the practice of medicine but to instruct her in such duties as belong to the sick room, to be carried out under the direction of the attending physician.

The book is divided into seven chapters upon the following subjects: Pregnancy, Preparation for Labor, Labor, Management of the Lying-in

Woman, Accidents and Emergencies, Management of the Child. These subjects are presented in a practical, common-sense manner, and can be very readily comprehended by a woman of average intelligence desirous of learning the duties of a nurse. The work has but little value to the profession, but every physician should recommend such a book to nurses, and should stimulate these women to greater intelligence in their calling.

Transactions of the Colorado State Medical Society. 10th and 11th Annual Conventions, 1880 and 1881. Denver, 1881. 8 vo. pp. 138.

This volume contains the proceedings of two consecutive annual meetings of the Colorado State Society, the first occupying about one-third, the second two-thirds of it. The proceedings of the 10th session comprise, besides the minutes, only the President's address and three voluntary papers—none possessing any special interest or value. The 11th session seems to have been more fruitful. The committee on legislation report that they have succeeded in getting a medical bill adopted by the Legislature in accordance with a resolution adopted by the society, and that the board of examiners, appointed by the Governor under this bill, have gone to work to execute the duties imposed upon them. The address of the President, Dr. F. G. Bancroft, of Denver, is devoted to an historical account of the medical societies of the State and to the aims and work of medical societies in general, and is of a sound and practical character. Dr. Jesse Hawes, of Greeley, discusses the existence of malaria in Colorado, and adduces proof that it does prevail to a limited extent even at elevations of over 5,000 feet. He reports a case of typically marked tertian intermittent—the only case contracted in Colorado that has come under his own observation. In

this connection the statement of Prof. Tommasi-Crudeli, in reference to the prevalence of malaria in the mountainous districts of Italy—lately adverted to in this JOURNAL—will be recalled. Dr. D. H. Dougan, of Leadville, contributes a paper on the curative effects of the Rocky Mountain Region on Asthma, and Dr. Charles Denison, of Denver, one entitled "A Plea for Tree Culture on the Plains of Colorado." There are in addition several other papers of interest in this part of the volume.

Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the U. S. for the Year 1881.

Washington, 1881. 8vo. Pp. 247.

From this report we learn that during the year ending June 30th, 1881, 32,613 patients received relief from this service, either in hospitals or dispensaries, which was an increase of nearly 8,000 over the previous year. The receipts from all sources were \$386,059, the net expenditures \$400,404. The cost per capita for patients has been reduced from \$16.18 in the previous year to \$12.27, this being due principally to the large increase of out-patients. Of the papers contained in this volume those of most interest are: "A Case of Compound Fracture of the Skull with Elevation of the Fragments," reported by Surgeon George Purviance; "Reports of Fatal Cases with Autopsies," compiled from the Reports of Medical Officers and Hospital Records; and Reports upon Beri-Beri, especially as observed at San Francisco, with "Notes of Microscopic Examination of Blood," by Dr. J. H. Wythe, Professor of Histology in the Pacific Medical College.

A Manual of Organic Materia Medica.

By JOHN M. MAISCH, Phar. D., Prof. Materia Medica and Botany, in the Philad. College of Pharmacy. Pp. 441. Henry C. Lea's Son & Co., Philadelphia, 1881.

A Manual of Ophthalmic Practice. By HENRY S. SCHELL, M. D., Surgeon to Wills Eye Hospital, etc. Pp. 256. D. G. Brinton, Philad. 1881.

Nervous Diseases, their Description and Treatment. A Manual for Students and Practitioners of Medicine. By ALLAN McLANE HAMILTON, M. D. Second Edition, Revised and Enlarged. Pp. 587. Henry C. Lea's Son & Co., 1881.

Drainage for Health, or Easy Lessons in Sanitary Science. By JOSEPH WILSON, M. D., Medical Director U. S. Army. Presley Blakiston, Philadelphia, 1881.

A Pocket Book of Physical Diagnosis for the Student and Physician. By EDWARD H. FARRINGTON, Lecturer on Pathology in the Woman's Medical College of Philadelphia, etc. \$2.00. Presley Blakiston, Philad., 1881.

The Opium Habit and Alcoholism. By FRED. HERMAN HUBBARD. \$2.00 A. S. Barnes & Co., New York City.

The Physician's Visiting List for 1882. By LINDSAY & BLAKISTON, Phila.

Physicians' Daily Pocket Record. Edited by D. G. BRINTON, M. D. Published by *Med. and Surg. Reporter*, Philadelphia, 1882.

MISCELLANY.

SPONGE-GRAFTING.—*Dr. D. J. Hamilton* has succeeded in healing old ulcers and other wounds by filling their cavities with pieces of sponge. The sponge is first prepared and then rendered aseptic by steeping in a solution of carbolic acid (1 to 20). The pores become filled with leucocytes and fibrin, the neighboring capillaries project into them in the form of loops, connective tissue is formed and the sponge becomes a part of the living body. The same results follow when it is inserted into the peritoneum and between muscular fibres.—*Ed. Med. Journ., Nov.*

GASTROSCOPY AND OESOPHAGOSCOPY.

—*Dr. J. Mikulicz*, it seems, has eclipsed the achievements of Mackenzie, Störck, Leiter and others by the invention of an instrument (based upon the electro-endoscope of Leiter) for the examination of the œsophagus and stomach, which he successfully and satisfactorily demonstrated upon a subject before the *Königliche Gesellschaft der Aertzte* of Vienna, Nov. 4th. The distinctness of the images is said to have excited the admiration of all who beheld them. The apparatus is, however, complicated and expensive; that exhibited by M. was constructed at the expense of Baron Nathaniel Rothschild, by whom it was presented to the general Poliklinik. It is provided with all the means necessary for the examination of all the cavities of the body accessible from the exterior.—*Wiener Med. Presse*, Nov. 6.

CATGUT IN LACERATED CERVIX.—

From an exclusive use for more than a year of this agent in the operation for lacerated cervix, Dr. A. Reeves Jackson, of Chicago, regards it as far superior to silver wire, silk, or gut of silkworm. The drawback to the use of these agents is that a second operation is always necessary for the purpose of removing the stitches, which involves the aid of one or two assistants, is attended by more or less pain, and is frequently dreaded almost as much as the original operation. In no instance did the catgut fail to maintain apposition until firm adhesion had occurred, when it melted away and disappeared without causing trouble to either patient or surgeon. But it is essential to pare the flaps with great care and in such direction and to such extent as to permit the surfaces to be brought *very easily* together, as otherwise the swelling will cause more or less cutting. By immersing in warm water before using the gut becomes pliable. It is especially indicated

when there is also a torn perineum, since both operations can be done simultaneously without the need of stretching the perineum in removing the upper sutures.—*N. Y. Med. Record*, Dec. 17.

TURNIPSEED VS. NUT SHELL.—

Dr. Turnipseed, of Columbia, S. C., has recently informed the public that he has invented an instrument, or a pair of instruments, by the use of which he says, if he had been called upon to treat our late President, he could have found and extracted the ball, and probably have saved his life. He declares that the whole case was "in a nutshell." To us it seems, if his statements are correct, that the whole case was in even a smaller space than that. It was really in a Turnipseed.—*Med. Gaz.*

GERMS AND DISEASE.—

Dr. G. C. Henderson, in a paper on "The Progress of Zymotic Micro-Pathology," read before the Epidemiological Society, expressed the opinion that the reasons for admitting the micro-organisms to be the causes of the diseases in anthrax, pneumo-enteritis, fowl-cholera, and some forms of septicæmia, were as strong as those for holding the trichina spiralis to be the cause of trichinosis.—*Brit. Med. Jour.* Dec. 3.

HYPODERMIC ADMINISTRATION OF MERCURY IN SYPHILIS.—*Streitz* has conducted a long series of experiments upon this subject at the military hospital, Brussels. He found the albuminate and peptonate, originally prepared by Bamberger, of Vienna to be the safest forms for use; never producing abscesses or other lesions. (The process for preparing the peptonate is here given which we omit). The advantages of this method of treatment are: the precision in the dosage; the harmlessness of the injections, and the integrity of the digestive organs which they insure;

no deception can be practised; mercurial stomatitis is avoided; no abscesses need result; the cure is rapid.—*Les Archives Med. Belges and N. Y. Med. Record.*

REMOVAL OF FOREIGN BODIES FROM THE EAR.—First, be sure there is one there. Second, remove by syringing if possible. Third, if it is so wedged in that it cannot be removed thus wait quietly until you can secure competent assistance, and then proceed with care and caution, and such instruments as one's ingenuity and the ordinary instrumental collections of aural surgeons will furnish.—*Roosa, N. Y. Med. Record*, Dec. 10.

HOSPITAL SUNDAY IN LONDON.—The total collection this year was £31,856, a larger amount than in any year since the institution of the custom nine years ago. £27,402 went to 94 hospitals, £2513 to fifty dispensaries, 2 per cent to surgical appliances. The working expenses were 3 per cent. or £1054. The number of contributing congregations has considerably increased.—*Med. Times and Gaz.*

NURSERY AND CHILD'S HOSPITAL.—We are gratified to be able to announce that this institution is now relieved of all pecuniary embarrassment. The managers have succeeded in paying off debts amounting to about \$45,000 within the past three years, besides maintaining the institution at a cost of \$4,000 to 5,000 a year. The hospital has fifty inmates.

ANGLO-SWISS MILK FOOD.—The proper feeding of infants is a subject which should engage the attention of the profession as upon it often depends the health and life of a large number of infants by necessity deprived of mother's milk. It is often a grave question to determine the character of food best suited to each individual case. One food will be

found to agree well with one infant and altogether fail with another, hence we can only judge, in a number of instances, by actual experience the peculiar wants of the bottle-fed infant. Among the number of foods intended as substitutes for mother's milk the Anglo-Swiss Milk Food holds a high position. It is intended to take the place of condensed milk whenever the use of it has been partially or fully discontinued, say from the age of four months. The special claim for this food is that in its preparation the starch is so deprived of its individual type as to render it impossible to form a paste from the food by heating it with water. This food comes very highly recommended from abroad and is deserving of very careful trial.

RESULTS OF NERVE-STRETCHING IN LOCOMOTOR ATAXY.—From a review of 19 cases of nerve-stretching in locomotor ataxy, *Dr. John Cavafy*, of St. George's Hospital finds the following results: In 17 of the 19 it was markedly beneficial or even curative so far as the pains were concerned. In the greater number this was brought about by one operation. In three the relief was confined to the territory of the operated nerve; in one the pains disappeared from the part operated on, but increased elsewhere. The ataxy itself is said to have been cured in 4 cases only; in 8 it was diminished, strikingly in 6; in 4 there was no improvement, whilst in the remainder the result is not stated. It appears probable therefore that benefit is to be always expected from the operation so far as the pains are concerned, but that the prospect of improvement in the ataxy is much less certain. The operation has not been followed by any injurious results beyond a temporary paralysis. Langenbuch prefers gradual extension kept up until a distinct effect is produced on the pulse and respiration.—*British Med. Jour.*, Dec. 17.

CONSULTATION WITH HOMŒOPATHS.

—The following resolution has been adopted by the *Royal College of Physicians of London*: "That while the college thinks it desirable not to fetter the action of the fellows, members and licentiates, with reference to any opinions they may adopt, it nevertheless expresses its opinion, that the assumption or acceptance by members of the profession, of designations implying the adoption of special modes of treatment, is opposed to those principles of the freedom and dignity of the profession which should govern the relations of its members to each other and to the public; the college, therefore, expects that all its fellows, members and licentiates will uphold these principles by discountenancing those who trade upon such designations."—*Brit. Med. Jour.*, Dec. 31.

RUPTURE OF THE HEART WITHOUT PREVIOUS SYMPTOMS.—*Dr. Neil Macleod*, of Shanghai, reports the following case: A short, stoutly built man of 58 was seized with a violent pain in the chest. The pain was confined to the limits of the sternum. He had a very anxious look, a little difficulty of breathing, and weakness of voice; no lividity; right pulse scarcely felt; left weak; no dullness nor *bruit*. Under a hypodermic of $\frac{1}{4}$ gr. of sulph. morphia he obtained temporary relief, but died suddenly about thirteen hours after the beginning of the attack. *Post mortem*: The pericardium contained bloody serum, and the heart lay embedded in a firm dark clot. On the anterior wall of the left ventricle a transverse incomplete rent one inch long was discovered. The heart wall was unusually thin at this point. Atheromatous degeneration of the aorta, aortic valves, and coronary arteries, with fatty degeneration of the heart substance, existed. There had never been anything in the symptoms to direct the patient's at-

tention to his heart, but he had lived a very quiet life, and his heart had probably never been severely tried. —*Brit. Med. Journ.*, Dec. 31st.

SELF-ABORTION.—*Dr. William H. Hardison*, of Richland, Arkansas, relates in the *Louisville Med. News*, of December 10th, two cases of self-abortion. The first was in a young unmarried girl three months gone in pregnancy. Acting upon the advice of an old woman she procured a round stick, as large as she could introduce well into the vagina, and with this "jobbed" the mouth of the womb as hard as she could "stand" three or four times a day. Abortion followed after continuing this process for three days, but it was succeeded by puerperal peritonitis. The second was in a married woman three and a half to four months gone, and was effected by means of a small rounded piece of a whalebone, ten to twelve inches long, the smaller end of which she introduced into the mouth of the womb guiding it with the forefinger of her left hand. In this she was following the example of a physician who had formerly attended her, and had found it necessary on account of some abnormality to induce abortion. Dr. H. adds that it is a very common practice for negro women in the South to induce self-abortion by jumping from a height.

PESSARY EMBEDDED IN VAGINAL TISSUE.—At the meeting of the New York Pathological Society, held Nov. 23rd, Dr. Wendt exhibited a specimen of a vagina in which a pessary was embedded. It had been introduced ten years previously and the vaginal tissue had grown over it so that it was impossible to remove it. There were evidences of metritis and perimetritis.—*Med. Gazette*, Dec. 10th.

PELVIC ABSCESS OPENING INTO THE UTERUS.—*F. A. Morrison*, of Indianapolis, reports in the *St. Louis Clinical*

Record of Nov., 1881, a case of pelvic abscess having its origin in a labor three years previously, in which the discharge took place into the uterus. The abscess was situated between the uterus and rectum. The opening was at the site of the internal os, and was only large enough to admit a small probe. There was extensive laceration on the left side of the cervix. The patient died of pyæmia, and the above condition was chiefly ascertained *post-mortem*.

CREDÉ'S METHOD; EXPRESSING THE PLACENTA.—Credé's method consists essentially in applying at first light and afterward stronger friction to the fundus uteri till an energetic contraction is obtained; at its height the uterus is grasped so that the fundus rests in the palm of the hand with the fingers to the front. The exercise of circular compression forces the placenta from the uterus, or in case of failure the process may be repeated until the object is accomplished. It is true that the expulsion of the placenta will, as a rule, occur spontaneously. The unaided uterus is, however, liable to relax and become the source of hemorrhage; or where the delivery does not take place speedily, it may on the other hand close down so as to imprison the placenta within its cavity. When Credé's method is systematically practiced the bugbear known as adherent placenta is the rarest of accidents. Expression should be practiced only during a contraction, and the force should be directed downward in the axis of the uterus. Spiegelberg lays great stress on exercising compression of the uterus from the moment the head emerges from the vulva.—*Lusk, quoted by Louisville Med. News.*

CAN THE SCHOOLS AFFORD TO ADOPT ADVANCED METHODS OF INSTRUCTION?—It is a strange fact but nevertheless I think it is a fact, that

the chief obstacle to the establishment of the higher grades of medical education comes from the medical schools. It has been truly said that with but a few exceptions, a commercial spirit pervades these bodies. It is the fee system that as it seems to me lies at the root of all the evil, and while this is perpetuated, I fear that there is little hope of betterment. It is not unnatural that those who are connected with the schools should be unwilling to see the large diminution in personal income that many claim would be the result of a change. But there is some room for argument on this point, and the experience certainly of one school does not lead to that conclusion. In the Harvard School—and I speak with certainty—there is more money received for instruction and more divided to-day among the instructors than there was when the fee system existed. The experience of the Harvard school on this point should, I think, be an incentive to others to try the plan.—*Dr. E. T. Caswell, Annual Address, American Academy of Medicine.*

INDIVIDUAL GENEROSITY IN THE ENDOWMENT OF SCHOOLS, OR OF CHAIRS OF INSTRUCTION.—There is certainly no reason for supposing that this resource would entirely fail us. In no country in the world is so much money contributed by private munificence for the purposes of education as in this; and if these life-giving streams have not taken the direction of professional schools, it is in fact because their needs have not been made manifest. We have had in the past twelve months a most gratifying proof of the readiness with which private means will be devoted to professional uses, in the successful inauguration of the Cartwright lectures under the most favorable auspices. These and similar endowments are doubtless destined to be productive of great good to the profession and add to the

already distinguished reputation of our American physicians. I cannot but think that if the right impetus was given, if the matter were placed in its true light, wealthy and generous hearts would contribute as freely to the endowment of medical schools as they now do to the various literary and charitable institutions of the land.—*Idem.*

ELECTION OF OFFICERS BALTIMORE MEDICAL ASSOCIATION.—At the annual meeting of this society, held on the 9th inst., the following were elected as officers for the year 1882: President, Dr. Christopher Johnston; Vice-Presidents, Drs. W. F. A. Kemp and T. A. Ashby; Recording and Reporting Secretary, Dr. Eugene F. Cordell; Corresponding Secretary, Dr. W. A. B. Sellman; Treasurer, Dr. R. H. P. Ellis; Executive Committee, Drs. Jos. T. Smith, James E. Gibbons and S. L. Frank; Committee of Honor, Drs. James A. Steuart, Judson Gilman and J. F. Perkins. On taking the Chair Dr. Johnston made an interesting address in which he urged upon the members the importance of punctuality in attendance, carefulness in preparation, and dignity and formality in the mode of conducting the proceedings. The banquet was in every way a success—socially, intellectually, numerically and gastronomically. The association is in a very flourishing condition. The membership numbers seventy—there is no reason why it should not reach one hundred and fifty twelve months hence.

SOCIETY BULLETIN.—*Medical and Surgical Society* meets every Wednesday at 8.30 P. M. *Clinical Society of Maryland* will meet Friday, Jan. 20th, at 8 P. M. Dr. Tiffany will read a paper on "The Treatment of Adherent Omental Hernia." *Academy of Medicine* will meet Tuesday, Jan. 17th, 8.30 P. M. *Obstet. and Gynecol. Section, Med. and Chi. Faculty*, will meet

Friday, Jan. 27th, at 8.15 P. M. Dr. John Morris will open the discussion on "The Obstetric Forceps." Dr. Ashby will read a paper "On the Part Which the Forceps Play in the Causation and Prevention of Perineal Lacerations." *Ophthalm. and Otolog. Section, Med. and Chi. Fac.*, will meet Wednesday, Feb. 1st, at 8 P. M. *Medical Association* will meet on Monday, Jan. 23rd, at 8 P. M.

OBITUARY.

DEATH OF DR. N. R. S. LANIER.—Dr. Nathan R. S. Lanier, a very promising and intelligent young physician, died in this city on the 28th of December, at the residence of his grandmother, Mrs. Dr. Nathan R. Smith. Dr. Lanier graduated at Harvard University, and then took the degree of M. D., at the University of Maryland. After spending some time abroad he returned to this country in feeble health. He possessed an unusually bright mind which was highly cultivated by close application and devotion to study. He gave promise of a useful and brilliant career in his profession, which he had just entered when ill-health began. He was prevented from taking any active part in professional work, but those who knew him well are aware of the fact that he possessed qualities of the highest order. He leaves many warm friends among the younger members of the profession who deeply sympathize with his bereaved friends in the loss they have sustained.

MEDICAL ITEMS.

THE Transactions of the International Medical Congress are ready for distribution; they fill four volumes. = Billoth has again excised the pylorus; in this case the duodenum was not divided at once, as before, but its posterior wall was first fixed to the stomach by sutures. The patient was shown two months after the operation. = A death from erysipelas following vaccination, in an infant ten weeks old, is reported from Manchester. = A death is recorded at the Great Northern Hospital, England, from the administration of one ounce of chloroform and ether combined, in the removal of a toe-nail. = Brierre de Boismont, the celebrated "alienist," has just died at Paris, aged 83. = Surgeon D. D. Huntington, U. S. A., has been put in charge of the army medical museum at Washington, and will complete the Surgical History of the War, left unfinished by Dr. Otis. = The Paris Academy of Medicine has just inherited a bequest of \$6,000, the interest of which is to form a prize fund for medical students. = It is said that over 100 women—more than one-eighth of all the practitioners of medicine of all sorts—are now engaged in the practice of medicine in Boston. = Ex-Gov. Morgan recently donated \$50,000 to the Manhattan Eye and Ear and Throat Hospital. = The College of Physicians and Surgeons of Chicago is a new applicant for educational patronage. = The Medical Society of the County of New York has over 800 members. = The *American Medical Digest* is a new monthly, modeled after the *London Medical Record*, just started in New York. = The Keokuk Medical College is said to be temporarily closed in consequence of the introduction of the body of a person who had died of small-pox in Chicago,

and the communication of this disease to a number of the students. = In Langenbuch's first case of nerve-stretching for locomotor ataxy, no posterior sclerosis was found *post mortem*. L. regarded it, nevertheless, as a genuine ataxy, but in so early a stage that the peripheral nerves only were affected. = *The Medical Times and Gazette*, referring to the addresses delivered during the International Congress, says: "They were all masterly addresses, but perhaps that from Dr. Billings was the most remarkable for its practical value, its originality, the wit and humor that illuminated it throughout, and the skill with which it was delivered." = *The Phil. Med. Times* says that one of the principal reasons why the *Index Medicus* has not been well supported is that it has not been properly advertised. = Why cannot we have an association in this city to provide funds for the widows and children of physicians who may die? = Carbolic acid is losing ground, and iodoform appears to be steadily gaining in reputation as a surgical dressing. The very unpleasant and persistent odor of the latter may in a measure be covered by the tonga bean. = From experiments recently performed, it would seem that permanganate of potassium is an antidote to the venom of serpents. = Ciaramelli relieved in thirty days an obstinate case of anæmia by injecting daily 2-3 grammes of a sol. of 1 gramme of ammonio-citrate of iron in 20 grammes of distilled water. = There are nineteen bodies in England which have the right to grant licenses to practice medicine. = R. Sodii sulphit., 5i; adipis, 5i; applied daily after bath, in linea versicolor. = *Duhring*. = Pirogoff is dead. = The proposed new medical weekly of New York has been abandoned. = It is said that patent medicines do not exist in Germany. = The University of Glasgow has 624 medical students.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

TREATMENT OF IRREDUCIBLE EPIPLOCELE.

BY L. MC LANE TIFFANY, A. B. (CANTAB.),
M. D.,

Professor of Surgery, University of Maryland.

(A paper read before the Clinical Society of Maryland, Jan. 20th, 1882).

Irreducible epiplocele may be properly considered under two heads: 1st, where the presence of the omentum in the sac is recent; 2nd, where the presence of the omentum in the sac dates from some time and is habitual.

First recent cases. Here the omentum is irreducible because of some change in structure due to strangulation; either gangrene is actually present or imminent, or else the force necessary to reduce would imperil its vitality, and the operator judges best that it shall not be returned to the belly. In treatment the choice lies between leaving it in the sac to slough or cutting it away. Exceptionally only is the former to be resorted to, as the presence of a sloughing mass in relation with peritoneum and an

open wound cannot but be prejudicial to a successful result. In addition to which it is likely that the inflammation incident to separation of the dead portion may extend upwards involving the general peritoneum of the belly. Once only have I resorted to this practice, and though recovery followed I cannot think the practice worthy of imitation.

M. B., female, had had a left femoral hernia strangulated for three days, with the usual symptoms. I saw her with her family physician at 10 P. M., and operated at once after a moderate attempt at reduction by manipulation. A small knuckle of gut, quite black from congestion, was found entirely wrapped up in omentum. The omentum was soft and sloughy looking. Gimbernat's ligament was divided and the gut returned. The ring was some distance from the surface, and to it the omentum was firmly adherent; so I left this latter to slough away, not closing the wound and placing a firm pad over the ring. The patient recovered without a single unfavorable symptom, the omentum coming away on the sixth day.

It is singularly interesting to notice the many ways advised by competent surgeons for cutting away omentum when its return to the belly is not desirable.

M. Caque, of Hotel Dieu, at Rheims, in *Mem. de l'Académie de Chirurgie*, Tom. III, p. 407, reports nine (9) cases where he cut away omentum and tied no vessels, returning the stump within the abdominal cavity. All recovered.

Velpeau, Mott's Translation, vol. III, p. 600, followed this method and lost his patient in ten hours from hemorrhage; so he advises that the omentum should be tied in small sections, or the vessels ligated separately, or if the part to be removed is small to enclose it by one ligature.

Pott, Searle's edition, vol. I, p. 362, says that it has always been the habit to tie and cut off, but he has seen many bad results from this practice, so he spreads out the omentum and cuts it off with scissors, ties nothing and returns the stump to the belly, has never seen any trouble result, and declares a ligature on the caul to be pernicious.

Hey, p. 188, carried out this practice in two cases, and nearly lost them both from hemorrhage, so he says that he will tie the vessels separately—a wise resolve.

Benjamin Bell, vol. I, p. 336, objects to ligatures, and says that no hemorrhage of any kind ever occurs after dividing the omentum, but if one vessel does bleed then tie it alone and bring the end out below. He says that ligatures on the omentum have had results, producing dragging, etc.

Charles Bell, vol. I, p. 199, tells how the inflammation runs retrograde upon the omentum within the belly, and condemns tying the omentum in bulk, since thereby the pressure of the ligature is substituted for that of the ring. Perhaps healthy omentum may be tied in bulk for the ligature

will cut through almost everything in tying, but never when the omentum is thickened.

Erichsen, vol. II, p. 621, prefers to tie in bulk.

Bryant, p. 475, says it should be ligatured in two or more portions and cut off, the ligatures being applied as near to the neck of the sac as possible. "Simply to cut off the omentum and to tie or twist the vessels is risky" in view of possible hemorrhage.

Gross, vol. II, p. 617, advises cutting and tying each vessel.

Enough has been cited to show that the older writers favor ligation of individual vessels, the more modern, ligation in sections or in bulk.

I have removed omentum four times by cutting; twice I tied in bulk—both patients died; twice I ligated the individual vessels—both patients recovered. I naturally consider the latter method preferable. The amount of omentum removed in each of the fatal cases was not very large, probably as large as half the palm of the hand; rapidly spreading peritonitis set in and carried off the patients.

I cannot avoid thinking that the ulceration, indispensable for the separation of the ligature, is far more apt to give rise to peritonitis than is a clean cut surface of serous membrane in the free border of which the bleeding points are individually secured. The substitution of a pinching ligature for a pinching abdominal ring offers, or rather has given, in my hands, but scant improvement. Ligation of the omentum in segments I have not tried, being satisfied with the results which have followed the plan of tying each vessel as cut.

Second—Chronic Irreducible epiplocele.—Omental hernia is more common in elderly than in young subjects, and since it becomes irreducible only after having existed a certain time, the prospect of its being seen in youth is proportionately lessened.

Omentum remains permanently in

the hernial sac usually from one of two causes, either having contracted adhesions or from change of structure.

Adhesions result from inflammation, not necessarily general or very acute, but there will almost always, if not always, be history of pain and discomfort, necessitating rest, elevation of tumor, etc. Occasionally the local inflammation is so distinct as to leave no manner of doubt. The pressure of a truss, over-much force in attempting reduction, habitual friction from wearing apparel, are all common and sufficient causes for inflammation and consequent adhesion between opposed serous surfaces. "Irreducible epiploceles are more liable to be inflamed than any other kinds of hernia, and a patient, the subject of reducible epiplocele, may have the hernia inflamed, from which cause it becomes permanently irreducible by contracting adhesions to the sac" (Holmes. Amer. Ed., vol. II, p. 682).

I am inclined to believe that change of structure in the protruding omentum is more often the cause of irreducibility than is the presence of adhesions. A permanent condensation and thickening of the epiplocele is brought about gradually by the continuance of the same causes, but in a minor degree which suffice to induce adhesions. There is no doubt but that the omentum is less able to withstand pressure and inflammation than are the bowels. Gross says, vol. II, p. 617: "It is well known that this body is much less capable of resisting the effects of inflammation than the intestine."

The habitually descended omentum being subjected to attrition and pressure becomes thickened and moulded into a stiff yellow rope of fatty looking matter, or else into irregular knobs, showing but scant vascularity. The former shape—rope—is more often found in relation with the abdominal ring and inguinal canal; the latter—

knobs—is more apt to be found in the dependent scrotum. An explanation of this change of shape is easily found in the variety of movements to which each locality is subjected.

In all cases of irreducible epiplocele which I have examined, either during life or after death, in which the omentum had experienced this condensing change, I have found adhesions more or less extensive at or about the external ring between the sac and the enclosed viscus; this independent of adhesions elsewhere. A point of importance, in regard to treatment of which I shall speak later. Percival Pott speaks of irreducible omentum of natural appearance in the lower part of the scrotum, but hard, firm and incompressible above. A hernia existing renders its possessor always liable to strangulation.

The condition of the possessor of an irreducible epiplocele is more dangerous, for his trouble is more difficult to treat palliatively and complications are more liable to arise.

No omentum ever fills the abdominal opening so accurately but that bowel may descend to the side of it; and of course the smaller the opening the less bowel will descend and the more obscure will be the seat of strangulation. A truss to retain intestine may press injuriously upon the omentum, and by avoiding pressure upon the omentum opportunity to descend may be afforded the bowel. —Scylla and Charybdis.

The clinical history of such cases is generally made up of attacks of descended gut difficult to return, and inflammatory symptoms mingled in varying proportion. When the gut is strangulated and kelotomy performed, the omentum is cut away as already described, the stump left in the abdominal ring, which the resulting inflammation closes, and a radical cure is the result; but when no strangulation is present is it necessary that the patient should remain in peril

until it actually supervene? I think not, for I am strongly of the opinion that in cases of irreducible epiplocele a cure should be effected by opening the sac, cutting away the omentum, tying individual vessels and sewing up the incision with a drainage tube out at the lower end. Before such operation is undertaken it would be proper to choose a fitting time and institute sufficient preparatory treatment, such as is usual in operations where the peritoneum is to be opened. In the MARYLAND MEDICAL JOURNAL for August 1st, 1880, I called attention to the fact that in old hernia the sac, owing probably to frequent descent of gut and consequent rubbing is not very liable to take on inflammatory action, a condition of affairs certainly existing in the class of cases under consideration. The frequent presence of adhesions at the neck of the sac has also been referred to. It is obvious that such adhesions should not be disturbed. Strict cleanliness, whether by Listerism or not, is of course a *sine qua non*.

When bowel is strangulated the risk attendant upon kelotomy is not in the operation but in its delay, the pinched gut causing danger, and where the gut is not injured, peril is proportionately less.

Experience has yet to show how soon the operation is justifiable; on two occasions I have resorted to it, both patients recovering promptly.

O. H., male, æt. 45, had had for years a lump in his right scrotum. Some years since it was tapped and much fluid drawn off (hydrocele). A truss was always worn. Two days previous to being seen by me it suddenly increased in size, its increase being accompanied by pain. The family physician effected apparent reduction, the tumor returning to its usual size. Two days later increase took place. I saw the patient; under anæsthesia partial reduction effected. The following day tumor as large as

ever, with pain and constipation present. For twenty-four hours rest with hips raised, low diet, ice, etc., employed, but the next day there was present much tenderness and redness of scrotum. I judged acute inflammation of the contents of the sac to be commencing and operated.

The rupture was a congenital one, the tunica vaginalis being continuous with the peritoneal cavity. A piece of omentum four inches long, much inflamed, fleshy and hard, was adherent to sac at several points; hydrocele to a small extent existed.

The omentum was cut off at the ring and left in position; two vessels in the stump required ligatures. The large serous sac, at the bottom of which was the testicle, was freely opened below, a drainage tube inserted and the upper opening closed, the ligatures being brought out through the drainage tube. Some inflammation of the scrotum ensued, but the patient recovered rapidly.

John W., æt. 64, strong, hearty man, had a right femoral hernia, which for some years had not been returned entirely into the belly. A truss was always worn, but with discomfort. Occasionally symptoms of strangulation appeared coincident with increase in size of tumor. By rest and manipulation at such times the hernia was partially reduced and dangerous symptoms passed away. December 1st, symptoms of strangulation appeared, pain, colic, constipation, etc. On the third day his family physician was called, who failed to reduce under chloroform. At this time the vomit was distinctly fecal.

I saw the case the same night at 11 P. M.; recognized a right femoral hernia strangulated. Hernia appeared to consist of bowel (?) and two hard lumps, probably omental.

Under anæsthesia the hernia was partially reduced, becoming dull on percussion. The gut was supposed to have been reduced. Believing that

I had to do with an irreducible epiplocele of long standing, in which the omentum was reduced to a cellulofatty mass, I operated at once, finding a sac as thick as chamois leather containing three inches of omentum, tough, hard and knotty.

I cut away the sac freely and divided the omentum as high as the ring, leaving it in position; one vessel in the stump of omentum required ligation. Recovery was rapid and uninterrupted.

A CASE OF CHRONIC PURULENT OTORRHOEA WITH PERFORATION OF BOTH MEMBRANÆ TYMPANI, FOLLOWED BY DISEASE OF THE LABYRINTH, AND FACIAL PARALYSIS OF THE RIGHT SIDE.

BY S. L. FRANK, M. D.

Oculist and Aurist to the Nursery and Childs' Hospital, to the Balto. Gen'l Dispensary, and Consulting Oculist and Aurist to the West End Free Dispensary for Children.

[The patient being brought before the Baltimore Medical Association, Dec. 27th, 1881, with the following remarks]:

In the practice of medicine every physician has occasion to treat cases of scarlet fever, and, as one of its complications, very often middle ear trouble, ending in perforation of the membranæ tympani and discharge from one or both ears.

Unfortunately for those so afflicted many physicians even at the present day (when it is no longer excusable) instead of treating the disease, often tell the patient or the relations to let it alone, that the patient "will outgrow it," or it will disappear in time; consequently valuable time is lost for beneficial treatment, with the risk not only of permanent impairment of hearing, but even the danger of its ultimately spreading to the brain and causing death. So well recognized

is this danger that many, if not all, of the English life insurance companies, and some in our own country, take no risk on persons who are suffering with a *discharge from the middle ear*.

In neglected cases of this nature the disease may, from the middle ear, pass on to the labyrinth, attacking the semi-circular canals, and bring on a train of symptoms recognized by aurists as labyrinth disease; it may also attack the facial nerve where it passes through the Fallopiian canal producing facial paralysis.

I am enabled this evening to bring before you a case of this kind—a man suffering with perforation of both membranæ tympani and chronic otorrhœa, complicated with labyrinth disease and facial paralysis on the right side.

A graphic history of the case, as written by the patient himself, and which I have translated from the German, is as follows: The heading of it is "The History of My Sufferings." When I was four years old (am now thirty) I had an attack of scarlet fever which left me deaf, with a discharge from both ears from that time on; no treatment was tried, as my parents were told "*the discharge would be driven somewhere else internally*." From my fifteenth to nineteenth year I suffered a great deal with earache, when I was advised by a physician to have all my bad teeth extracted(!) which I did, and thought my hearing was improved thereby. In the spring of 1870 my hearing became worse, and someone advised me to syringe my ears with cold water, which I foolishly did, when a roaring in the right ear set in, and since then I hear very little on that side. My left ear changes; sometimes I hear better and then again worse. The winter of 1871, I consulted an aurist in this city, and after some weeks treatment, perceiving no improvement, I discontinued, and let the disease take its course.

On the 19th of March, 1881, I was taken with two boils (?) in the right ear, which caused me the most intense suffering. One of them was opened by my physician, and the other broke during the night; the pain then ceased, with some discharge from the ear.

April 17th (Easter Sunday) I suffered with headache the entire day, and the hearing in my left ear was much impaired. I syringed both ears with castile soap and warm water, and then heard better, some pus coming away with the water. I took a walk afterwards, and in the evening I felt a sort of pressure in the right ear as if there was something in it. The next morning when I awoke I felt as if I was in a boat which was rocking to and fro (from stem to stern). This rocking motion pleased me; as soon as I opened my eyes or lay upon my back it disappeared; when I attempted to get up I could not stand upon my feet, but staggered like a drunken man; I felt badly, like vomiting, all the time; no appetite, sleepy, exhausted, and could not see far. The next day I took a walk but in the evening became worse; could not walk ten steps without falling. The day following I could not stand upon my feet; wanted to sleep all the time; it was black before my eyes; the slightest noise hurt me. I sent for my physician; he said it was vertigo, and that I was "*bilious*" (!). He gave me tonics; I was confined to the house three weeks; improvement set in, but the giddiness kept on nearly every day. August 28th I took a walk and felt right well. On the 29th, when I attempted to get up in the morning, I fell over a number of times; felt sick, and crawled out of the room on my hands and feet; when I got into the fresh air I felt better.

August 30th I went to work, but it was with great difficulty I could keep on, as every jar hurt me; when I tried to carry my work away I lost

my balance and fell on my right side; the same thing took place when I carried a bucket of water.

August 31st I put myself under your treatment.

The following is taken from my note book, in continuation of the foregoing: The patient complains of the noises in the ears and pain back of the head on the right side (*not* over the mastoid bone). Both ears are discharging, and he has a very *staggering* walk like a drunken man (but with the tendency to go to the right), his wife, who came with him, saying she was almost ashamed to walk with him on the street, as people supposed he was intoxicated. Upon closing his eyes and attempting to walk he reels from side to side, but principally appears as if he would fall on the right side. There is no specific history whatever, nor any signs indicating that disease. Upon examining the ears I find both having a moderate purulent discharge and a large perforation in each membranæ tympani, below the malleus. Right ear, watch *not heard anywhere*, either at, in front of, or behind ear. Left ear, watch heard in contact with ear only, and not before. Tuning fork heard on the left ear. Right ear, very doubtful if it is heard, whether applied to the teeth or on the head. The treatment ordered was to keep the ears clean by gently syringing with tepid water first, and then applying a solution of zinc sulphas three gr., carbolic acid, five drops; ad \mathfrak{z} i aquæ dest. morning and evening, and internally on account of his anæmic appearance, pills consisting of sulphate of iron, sulphate of quinine, each one gr., and ext. nux vomica, one-third gr., one to be taken morning, noon and night. Under this treatment, with the addition later on of boracic acid powder blown into the ears after they were cleaned, he improved very much indeed.

Nothing of importance occurred for sometime. October 4th, on account

of pain in the right ear, he was given a solution of sulphate of atropia one-half gr., ad. aq. \mathfrak{z} ss, to drop in ear whenever he was suffering pain in it. November 20th, both ears *dry* and no pain. December 2nd, he came with the following history since last visit: November 28th to 29th his wife noticed side of face drawn (facial paralysis), with inability to close the right eye. I found mouth and tongue drawn to left side; epiphora right eye and the walk very staggering; both ears again slightly discharging. He was put upon iodide potash, ten grains, t. d., internally, and ordered to keep the ears clean with absorbent cotton.

As you will perceive by looking at the patient, the symptoms of facial paralysis have already disappeared; he closes his right eye the same as the left. The epiphora has ceased, and mouth and tongue are no longer drawn towards the left side. The staggering walk still exists, although not so marked as formerly. He also complains of pain back of the head at times, *not over the mastoid bone*, and percussing the head does *not* hurt him, nor is it tender, red or swollen anywhere, so that at present no periostitis exists.

The symptoms of facial paralysis had already disappeared on the 18th, nine days ago. A very interesting symptom which the patient also has is that at night when he walks on the street, wherever there is a light, he can walk straight, but as soon as it is dark, with no light to guide him, then he staggers and walks as if the road were uneven. His memory was affected when the attack first came on at Easter, but is good since he is under treatment, as I have frequently convinced myself. Sight was also affected at that time, the eyes felt weak, and appeared dull, but are now good; he has normal vision, and nothing abnormal is to be detected with the ophthalmoscope.

To-day (Dec. 27th, 1881,) he in-

forms me that the past week he has suffered a good deal again with pain on the right side of the occipital bone and along the right sterno-cleoid mastoid muscle; had two attacks a day, each lasting about an hour, but it ceased yesterday. I will let the patient walk across the room with closed eyes, when you will perceive the staggering gait towards the right side all the time, although it is not nearly as marked as it was when I first saw him.

Now what has taken place in this case to produce these symptoms, and what is the prognosis and treatment?

In the first place, as I said in the beginning, nothing of moment having been done to check the disease, it has passed from the middle ear to the labyrinth, affected the semi-circular canal and the facial nerve. Has the disease run its course? I think not, although the facial paralysis so promptly disappeared again. There is still great danger in this case of the disease working its way through the roof of the inner ear to the brain, and thereby causing death.

Of late years aurists, and notably *Schwartz*, of *Halle*, in serious cases of purulent middle ear disease have trephined the mastoid to give free exit to the pent-up pus and affected bone, with great success. This operation is not called for in this case at present, as the patient has no pain at the mastoid, either upon pressing or percussing it, the pain being located much farther back at the occipital bone, and besides the Eustachian catheter and Politzer's air-bag both force the air easily through the middle ear, so that the pus, if any present, can escape through the external canal of the ear. Nevertheless, it may eventually become necessary to open the mastoid from without if recovery does not take place or the symptoms disappear.

He is now taking iodide potash, 10 gr., with syr. iodide iron, gtt. xx t. d.

internally, the latter because he still has an anæmic appearance, and for the ears absorbent cotton to keep them clean with boracic acid powder whenever there is any discharge. At present the patient's appetite is good and he rests well, but the case must be watched carefully, and the symptoms treated as they appear.

In conclusion, I hope my colleagues, when they meet with patients *suffering with otorrhœa, will do all in their power to combat the widely-spread error that such troubles are best let alone; treatment of the disease is necessary, and generally curative, but if allowed to run on the results are apt to be very serious.*

MINORITY REPORT OF THE SPECIAL COMMITTEE ON THE PREVENTION OF VENEREAL DIS- EASES.

Made at the Recent Meeting of American Public Health Association, by JOHN MORRIS, M. D., of Baltimore.

The undersigned, whilst agreeing entirely with the views submitted in the Report of the Committee on the Prevention of Venereal Diseases, and approving of the proposed Act submitted by the Committee, as far as it goes, does not believe that the provisions of the Act are sufficiently comprehensive to effect the desired end, and he, therefore, begs leave to submit the draft of a law, wider in range and more specific in character—a law, which if carried out, he believes, will greatly inure to the health of the community and the well being of society.

In the Act appended it has been provided, as a first step, that all persons engaged in habits of prostitution shall be registered. This as a police regulation will add very much to the safety of the people. It will be compulsory upon all those visiting as well as those living in houses of prostitu-

tion. It is well known that the women most dangerous to the health of the community frequent, but do not live in houses of ill fame. It is important that this very dangerous class should be brought under police surveillance. The very fact of their being compelled to register their names will deter them from visiting houses of prostitution, and thus the number of secret prostitutions will be much reduced. This procedure is not at all arbitrary, but a necessary police arrangement. The burglar, the thief, the robber, the counterfeiter, and all persons known to the police as dangerous to society are compelled to submit to inspection and to be photographed for future identification. The prostitute may very properly be ranked among the dangerous classes, and her personal conduct should be a matter of police supervision. She should be watched and guarded, and as far as possible prevented from plying her occupation to the detriment of the public health. Her registration is the first step towards this end. The medical examination and the detention in the hospital, when necessary, are the only means by which her existence can be made tolerable in the community. In framing the Act, the undersigned has provided as far as possible against interfering with the liberty of the subject, and has endeavored to make the burthens of the Act bear as lightly as possible upon those brought under its provisions. He has, therefore, provided that an examination by any medical gentleman of good standing, made at stated periods, will be sufficient to exempt women from an examination by the public officer of health. How far this will prove effective in carrying out the intentions of the Committee remains to be seen. It was, however, thought best to insert this clause, so that the Act might be rendered less objectionable to many persons who oppose public examination of women.

Should it prove after trial that this privilege should be withdrawn, the Act can be amended at some future day. It will be observed that the undersigned has avoided in the proposed law any system of licensing prostitution, a feature which has appeared objectionable in all laws heretofore enacted on the subject. It will also be observed that no tax is imposed or no charge made for medical services to those coming under the provisions of the Bill. It is solely a state sanitary measure intended not only for the good of those subject to the law, but for the community at large.

Respectfully submitted,
JOHN MORRIS, M. D.

AN ACT.

ENTITLED AN ACT TO PREVENT THE
SPREAD OF SYPHILITIC DISEASES
IN THE CITY OF BALTIMORE.

ARTICLE I.—Be it enacted by the General Assembly of Maryland, That it shall be the duty of every person being the owner or occupier of any house, room, or place used for purposes of prostitution within the limits of the city of Baltimore, or being the manager or assistant in the management of such house, room, or place, to register in the office of the Marshal of Police of said city the names of all persons living in said house, room or place, and all persons visiting said house, room or place for purposes of prostitution, and any one failing to carry out this enactment shall be deemed guilty of a misdemeanor, and shall upon conviction before a Justice of the Peace, or in the Criminal Court of Baltimore city, be liable to a penalty of one hundred dollars.

ARTICLE II.—It shall be the duty of every woman registered under this Act to be examined twice in each month by one of the police physicians of Baltimore, hereafter to be appointed under this Act, or by some respectable private physician, whose

certificate will be deemed sufficient for the purpose of its being ascertained whether such woman is suffering from venereal disease, and in case any woman shall refuse to appear at the time and place appointed for examination, or shall refuse to be visited for such purposes, she shall be subject upon conviction in the Criminal Court of Baltimore city to a punishment of three months imprisonment in the House of Correction of the State of Maryland, it being however provided, that said punishment shall be remitted as soon as the person sentenced shall consent to a medical examination.

ARTICLE III.—And be it enacted, That it shall be the duty of the police physicians appointed under this Act to report to the Health Commissioner of the city of Baltimore, the names and addresses of all persons suffering from venereal disease, and it shall be the duty of said Health Commissioner to have such persons removed to an hospital or hospitals, or to the House of the Good Shepherd of the city of Baltimore, and detained there until entirely healed, said hospital or hospitals to be by him designated.

ARTICLE IV.—And be it enacted, That any woman refusing to submit to detention for the purposes before mentioned shall be liable on conviction in the Criminal Court of Baltimore city to punishment by imprisonment in the House of Correction of the state of Maryland for a term not exceeding three months.

ARTICLE V.—And be it enacted, That the certificate of the resident physician of the hospital to which the woman is consigned shall be deemed sufficient evidence of the healthfulness of any woman committed to said hospital, and on obtaining such certificate the woman shall be discharged from further medical care.

ARTICLE VI.—And be it enacted, That it shall be the duty of the Board of Police Commissioners of Baltimore

city to annually estimate the sum of money necessary for the carrying out of the provisions of the Act, and they shall certify the same to the Mayor and City Council of Baltimore as a part of the current expenses of the said Board, and the same shall be collected by the city of Baltimore as a part of the police tax of said city as provided for under Section 812, Chapter 367, of the Acts of 1867.

ARTICLE VII.—And be it enacted, That it shall be the duty of the Mayor of the city of Baltimore to appoint annually, with the concurrence of both branches of the City Council of said city, four regularly educated medical men of good character as police physicians to perform the duties enjoined by this Act, and further, it shall be the duty of the Health Commissioner of the city of Baltimore to divide said city into four districts or departments, to each of which one of the physicians before mentioned shall be assigned.

ARTICLE VIII.—And be it enacted, That it shall be the duty of the police physicians appointed under this Act to prescribe times and places for the examination of prostitutes, notice of which shall be given in writing. If any woman detained in an hospital considers herself entitled to be discharged therefrom and the chief medical officer of the hospital refuses to discharge her, such woman shall on her request be conveyed before a Justice of the Peace, who, if he is satisfied upon reasonable evidence that she is free from a contagious disease, shall discharge her from such hospital, and such order of discharge shall have the same effect as the discharge of the chief medical officer.

ARTICLE IX.—And be it enacted, That if any woman subject to a medical examination under this Act desires to be relieved therefrom and not being under detention in an Hospital makes application in writing in that behalf to a Justice of the Peace of the city of Baltimore, the Justice

shall appoint by a notice in writing a time and place for the hearing of the application, and shall cause the notice to be delivered to the applicant, and a copy of the application and of the notice to be delivered to the Marshal of Police.

ARTICLE X.—And be it enacted, That if on the hearing of the application it is shown to the satisfaction of the Justice of the Peace that the applicant has ceased to be a common prostitute, or if the applicant with the approval of the Justice enters into a recognizance with or without sureties, as to the Justice seems meet, for her good behaviour during three months thereafter, the Justice shall order that she be relieved from the periodical medical examination.

ARTICLE XI.—And be it enacted, That every such recognizance shall be deemed to be forfeited if at any time during the prescribed term the woman to whom it relates is discovered within the limits of the city of Baltimore in any public thoroughfare, street, or place for the purposes of prostitution, or otherwise conducts herself as a common prostitute.

ARTICLE XII.—And be it enacted, That if any person being the owner, or occupier of any house, room, or place, within the limits of the city of Baltimore, or being a manager or assistant in the management thereof, having reasonable cause to believe any woman to be a common prostitute and to be affected with a contagious disease, induces or suffers her to resort to, or be in, that house, room or place, for the purpose of prostitution, he, or she shall be guilty of an offense against this Act, and on summary conviction thereof in the Criminal Court of the city of Baltimore, shall be liable to a penalty not exceeding one hundred dollars, or at the discretion of the Judge of said Criminal Court, be imprisoned in the Baltimore City Jail for any term not exceeding six months. Provided that a convic-

tion under this enactment shall not exempt the offender from any penal or other consequences to which he or she may be liable for keeping or being concerned in keeping a bawdy house or disorderly house.

ARTICLE XIII.—And be it enacted, That any notice or order, or other instrument required to be served by this Act, on a woman, shall be served by delivery thereof to some person for her at her usual place of abode, or by delivery thereof to her personally.

ARTICLE XIV.—And be it enacted, That any action or prosecution under this Act shall be commenced within three months after the offense done, and not afterwards, and notice in writing of any such action and of the cause thereof shall be given to the intended defendant one month at least, before the commencement of the action.

ARTICLE XV.—And be it enacted, That all fines collected under this Act shall be paid into the Treasury of the City of Baltimore.

ARTICLE XVI.—And be it enacted, That any confession or information, or knowledge of fact under this Act, shall not be given or received as evidence in any Court of Justice in this State.

ARTICLE XVII.—And be it further enacted, That this Act shall go into effect on the first day of July eighteen hundred and eighty-two.

CORRESPONDENCE.

SMALL-POX PUSTULATION IN THE FŒTUS IN UTERO.

A Reply to Professor McSherry.

Messrs. Editors:

In the January number of the MARYLAND MEDICAL JOURNAL I find an address by Dr. Richard McSherry, Professor of the Principles and Practice of Medicine, in the University of Maryland, read before the "Baltimore Academy of Medicine," December

20th, 1881, in which the following paragraphs appear—subject, Small-pox :

"Speaking of ectrotic treatment, various authors assert that the total exclusion of air from the surface prevents pustulation; how, then, can pustulation ever occur in the fœtus in utero? I have never met a practitioner who has seen such a case, though all had read of them."

"Whether true pustulation can occur in the fœtus in utero, I would like to hear from some practitioner who speaks from personal and ocular observation."

Evidently the Professor has some doubts as to the possibility of such an occurrence, and in a very laudable spirit invites the information from medical practitioners, if anyone of them can speak "from personal and ocular observation."

I, therefore, reply to Dr. McSherry that "true pustulation in the fœtus in utero" is not only a possible occurrence, but an absolute certainty, as verified in my own personal observation.

In the winter of 1832 and 1833, in the lower end of Calvert County, Maryland, in that portion adjacent to the Patuxent River, just below the mouth of St. Leonard's Creek, upon the plantation of Dr. McGill, of Fredricksburg, Maryland, there occurred a number of cases of small-pox, some mild, others confluent and grave; among the latter was a negro woman, some 30 years of age, near the end of gestation.

She gave birth to her child some ten or twelve days after the eruptive stage of her disease, and perhaps two to three weeks of her full term.

I was with her at her confinement. The fœtus was evidently living up to within a short time of its birth, as the mother had felt its motions distinctly within a few hours of her delivery; and when born there was no appearance whatever to throw discredit upon the mother's statement; but my eyes looked upon a sickening spectacle—a

fœtus covered with a full and distinct crop of small-pox pustules from head to foot, some of them already ruptured, and the excavations filled with pus, and many still unruptured, so characteristic as to mark the true nature of the eruption at first sight.

I very carefully examined the fœtus with enthusiastic interest, and desired much to preserve it as a pathological specimen, but in the country I had neither jar nor alcohol in which to keep it. But Dr. McSherry is assured that this case is accurately and truly reported from my own "personal and ocular observation."

The mother recovered, as did all my other small-pox cases. They were all treated strictly on the cooling and antiphlogistic plan, which I had learned in my own person first, and subsequently in my professional experience, to be the true and successful method of treating small-pox cases.

Until I read Dr. McSherry's article I did not know there was any doubt in the medical mind as to the "fœtus in utero" contracting small-pox from its diseased mother; nor can I see from a medical standpoint why its possibility—nay, its probability and certainty—could be for one moment doubted.

Still it is remarkable, if, as Dr. McSherry asserts, up to this time, no such occurrence has been reported by any medical man as coming under his "personal and ocular observation."

Though my case occurred nearly fifty years ago, it has never been reported, simply because I deemed it unnecessary and not of sufficient interest to be reported; and I am glad that Dr. McSherry has called for this information, which may be lying dormant in the experience of other physicians as it was so long in mine; for it can be hardly possible, out of the great number of old and experienced

physicians throughout this country and Europe, I am the only one who has observed this pathological fact.

Very respectfully,

RICHARD H. DAY, M. D.

Baton Rouge, Louisiana.

To the Editors of Maryland Med. Jour.

Gentlemen:—I have vaccinated a lady upon various different occasions in this city with perfectly fresh virus, at her request, without any result, which she said would be the case, as she never in her life had taken vaccination, though the operation had been performed by various practitioners. I have seen other instances of this insusceptibility. Now a *fœtus in utero* may take small-pox from the mother, and come into the world protected from that disease without having any marks upon it to explain the exemption, or it may pass through an attack without the mother suffering herself with what she transmits to her child, and under such circumstances we can readily understand why vaccination should never take effect, or at least not until after many years, for sometimes adults take it who would never take it as children.

But it has occurred to me that vaccination of a pregnant woman may have an influence in protecting the child as well as the mother. I have not seen the subject discussed, and I would be pleased to have any information that you or your readers can give in regard to this matter.

I am yours very respectfully,

RICHARD McSHERRY, M. D.

SOCIETY REPORTS.

CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD DEC. 2ND, 1881.

*(Specially Reported for the Maryland Medical Journal).*I. EDMONDSON ATKINSON, M. D.,
President, in the Chair.

SMITH'S ANTERIOR SPLINT; DISCUSSION ON DR. MICHAEL'S PAPER (see *Maryland Medical Journal*, Jan. 1, 1882). *Dr. Theobald* quoted the views of Dr. Alan P. Smith, who holds that—owing to the angle formed by the splint—there is a decided traction upon the calf of the leg. When properly applied the splint is not bandaged *immovably* to the pelvis, but so as to allow of a certain freedom of movement between the splint and the body. Hence there is a sliding above and a consequent constant traction on the limb below. But the splint never slips down on the instep.

Dr. Coskery had applied the anterior splint over forty times. The cause of the overriding of the fragments of bone is muscular contraction; hence when the muscles are relaxed the bones tend to fall into position. This relaxation is produced by instruments of the double-inclined plane order. He had always taught the principle stated by Dr. A. P. Smith. Extension is made by drawing on the calf of the leg and lower part of the splint through the bandage. The anterior splint fulfills all the functions of the double-inclined plane. It is not the best mode of treating all fractures of the lower extremity. There is danger in these cases of pulmonary congestion from the prolonged recumbent position, and hence the importance of getting patients up as soon as possible. This may be accomplished by the use of the plaster of Paris dressing. *Dr. C.* had used the anterior splint in twenty-five cases of

gun-shot wounds of the thigh, and in these its advantages are apparent.

Dr. Michael reiterated his views in regard to extension. The apparatus simply retains after reduction. It is important not to forget local treatment. Even in the plaster of Paris dressing there will be some motion of the fragments in moving about. He preferred the double-inclined plane. The object of the obliquity of the cord is to retain the parts in apposition by relaxing the muscles.

Dr. Erich.—As Prof. Smith applied his instrument extension is made upon the lower fragment because the attachment to the trunk is not a fixed one. Continuous extension by plaster, &c., is not desirable and would do more harm than good; it would involve continuous pressure, which is bound to cause mischief. Usually, however, the patient or his friends interfere and extension is arrested. The anterior splint has done an immense amount of good. In ignorant hands it is harmless.

Dr. Miles.—Constant traction is not injurious. He has seen it used for years in hip-joint disease.

Dr. Latimer had used the apparatus probably as often as anyone present. In compound fractures its advantages are obvious. He had never been able to adjust a fracture of the thigh with any other apparatus so that the patient could move about. There is no extension exerted on the lower fragment, but on the pelvis. The upper cord is applied above the seat of fracture and all the traction is upon the pelvis. He claimed the following advantages for the anterior splint:

1. It is the best instrument for compound fractures.
2. It is the best instrument for aged persons.
3. It is the best instrument for fractures of the thigh below the middle third.
4. It is the best instrument for intracapsular fractures.

Dr. Tiffany.—The effect is felt at the centre of gravity of the limb not in the direction of either cord but in the direction of the resultant of the two. Dr. T. doesn't use a pelvic band for several days—in the majority of cases—in this respect agreeing with Hodgen. The adhesive plaster used for extension should never be allowed to touch the tendo achillis or heel for fear of sores. He had never seen a museum specimen of fractured femur in which union had taken place without shortening.

ARTIFICIAL ANUS RESULTING FROM TYING THE BOWEL WITH THE UMBILICAL CORD.—*Dr. Latimer* reported the following case: Five days ago he was called to see a new-born infant. The birth had been attended by a homœopathic physician, who, for some reason, had applied a ligature to the cord three successive times. The last time some protrusion of the intestine had occurred and this had been included in the ligature. The result was sloughing and the formation of an artificial anus at the umbilical opening, the lips of which protruded, and from them gas and fecal matter escaped. To-day he was summoned and found about six inches of the bowel invaginated in the opening and lying out on the abdomen. It was reduced with difficulty and only after incising the upper part of the aperture. The child is not expected to live. The case is one of very great rarity, no such case being on record as far as the reporter had been able to find out. (The child died on the following day).

SPECIMEN OF SYPHILITIC CRANIUM.—*The President* presented the specimen of the cranium of a patient, æt. 28, who had had symptoms of fits (epilepsy) due to cerebral syphilis. His death resulted from chloroform, or in a fit or from other cause unknown, as he was not under observation at the time of his death. On the left side the dura-mater and brain were

adherent. On the right, the dura-mater was adherent to the skull but not to the brain. There was thickening of one side of the frontal bone—not inflammatory, but from hypernutrition. On the left parietal surface of the cranium there was inflammatory thickening and adhesion of membranes and great thickening of cranium from gummy osteitis extending through the entire thickness of skull. The case had been reported as one of cerebral syphilis by Dr. Atkinson in the *Va. Med. Monthly*, Dec., 1879

The brain had been examined by Dr. Miles, who had found no special cause apparent for the occurrence of the epilepsy. There was evidence, however, of congestion and of past inflammation. The kidneys were very much enlarged, presenting the general appearance of the large white kidney; he supposed this condition to be of recent origin. There were no signs of the contracted kidney. There was no paralysis between the seizures, and the patient had always been able to earn a living.

Dr. Harlan had had this patient under treatment for some time at the General Dispensary, where he gave him a mixture of iodide and bromide of potassium, and chloral hydrate at bedtime.

SPECIMEN OF DISEASED LIVER.—*Dr. R. Winslow* exhibited a specimen obtained from a man who came under care suffering apparently from remittent fever. No positive diagnosis, however, was made. After six weeks jaundice appeared and was very marked. There was no bile pigment in the feces. The patient died, and on *post-mortem* the liver was found considerably enlarged and exhibiting yellow granules apparently metastatic. There was enormous enlargement of the mesenteric glands behind the lesser curvature of the stomach and running into the transverse fissure of the liver. The gall-bladder was collapsed and empty, and contrary to expectation

there was no obstruction to the flow of bile. The ductus communis choledochus was patent. The condition was apparently hepatitis, although it may have been due to amyloid degeneration.

The President regarded the condition as either chronic indurated hepatitis or lardaceous degeneration—the iodine test would decide as to the latter.

STATED MEETING HELD DEC. 16TH, 1881.

I. E. ATKINSON, M. D., President, in the Chair.

Dr. Coskery read a paper entitled "IN WHAT CASES AND WHEN IS THE APPLICATION OF THE TREPHINE JUSTIFIABLE OR ADVISABLE?" (See the number of this JOURNAL for Jan. 1, 1882).

Dr. Michael said that many so-called cases of "preventive trephining" are *post-hoc* cases. The simple operation was not serious; Hyrtl had done it many times. Dr. M. holds the same views as Dr. Coskery. He would not trephine unless there were evidence of compression. Several cases of permanent depression—two of at least three-quarters of an inch—without symptoms had come under his observation.

SPECIMEN OF FŒTUS SHOWING ARRESTED DEVELOPMENT.—Dr. Morris reported the following: A lady, æt. 43, was married when 42. She continued regular until seven and a half months ago, when she became pregnant. She had just miscarried the fœtus here shown. There was nothing peculiar about the labor except an immense bag of waters. The fœtus was of a gelatinous consistency and entirely devoid of cuticle. There was no cause apparent for the arrested development; it might have been due to syphilis, but investigation failed to elicit any evidence of that.

IMPERFORATE RECTUM.—Dr. Chambers reported the case of a twin child

which died on the second day after birth. All the organs were normal except the large intestine, which was impervious from the splenic flexure of the colon to the rectum.

TONGA BEAN TO DISGUISE THE ODOR OF IODOFORM.—Dr. Bermann said the widespread use of iodoform makes it desirable to have some means of counteracting its very disagreeable odor. Mosetig had discovered that the tonga bean has this power. Two split beans were sufficient for 3xxx. The beans are simply split and placed in a bottle containing the agent.

TREATMENT OF HERNIA BY SUBCUTANEOUS INJECTION.—Dr. Rohe exhibited a syringe, which had been employed by a physician of Tuscumbia, Alabama, in operating upon hernia by the so-called Heaton's method, since 1845. The method consists in pinching up a fold of skin and injecting some agent capable of causing adhesive inflammation. The physician in question (Dr. Hunter) used oil of cloves. This instrument resembled the hypodermic syringe, but was much smaller. It was made by a gunsmith of Tuscumbia, and had been used in a great many instances by the inventor.

SPECIMENS OF PERFORATING ULCER OF COLON AND RENAL CYSTS.—The President exhibited some specimens obtained *post-mortem* from the body of a primipara, who died two weeks after confinement, of puerperal septicæmia. The patient had had a lacerated perineum. The symptoms of septicæmia came on about the fourth day. The abdomen was much distended. On opening it there were found sacculations and evidences of extensive inflammation of the colon with a perforating ulcer near the sigmoid flexure. There were no abscesses found in the colon, although the ulcer in question may have been due to an embolic abscess. There were embolic abscesses in the kidneys and lungs. The President also exhibited kidneys in which were multiple cysts,

the contents of which consisted of turbid, sanguinolent serum, without pus. The patient was an elderly man and drinker, who died suddenly with symptoms of uraemia.

SPONTANEOUS RUPTURE OF AN IMPERFORATE VAGINAL MEMBRANE.—*Dr. Morris* reported the following case: A girl of 16 had suffered for the past two years from severe monthly pains in the abdomen—much increased during the last six months. She was thin, emaciated and had symptoms of hectic fever. Upon examination a vagina one and a half inches in length and terminating in an imperforate membrane was discovered, but no hymen. The clitoris was very small, the external genitalia illy developed. He thought he could feel the uterus through the rectum. An operation for her relief was advised but refused. A few days ago the patient was awakened by the discharge from the vagina into the bed of a mass of black blood. Ulceration had taken place through the imperforate membrane, giving exit to the imprisoned menstrual secretion.

HYPODERMIC INJECTION OF MERCURY IN SYPHILIS.—*Dr. Theobald* called attention to this subject and remarked that the hypodermic method of employing mercury lately recommended seemed to him to possess no advantages over the ordinary mode of administration by the mouth. It had been claimed as one advantage of the method referred to that it gave an opportunity for the free administration of other agents, as tonics, stimulants, etc., by the stomach, but the use of mercury by the mouth does not prevent the simultaneous employment of these and other remedies. The frequent visits required to the physician's office were also less likely to secure secrecy than the ordinary method, nor were the effects of the hypodermic treatment more rapid. It was a very rare thing for him to see any disturbance of the stomach or

bowels from the internal administration of mercury.

He related a case of neuro-retinitis in which the patient had been taking strychnia for a long time for "tobacco-amaurosis." Detecting some inflammation he gave bichloride of mercury, increasing the dose gradually to gr. one-fifth, and continuing for several weeks without unpleasant effects. The strychnia was also used at the same time—never more than one-sixteenth to one-twelfth gr.

The President's experience in this method of using mercury was limited to about 75 cases. It gave rise in his hands to much local inflammation with bad resultant nodules. He preferred the administration by the mouth, the effect being as rapid and any marked disturbance of the bowels being entirely exceptional. In the case of a tailor, who had a chancre followed by enlarged ganglia of the neck, under simple treatment roseola developed all over his body; grey powder was then ordered and in three days his roseola was entirely gone but he was profusely salivated. The hypodermic method is much preferable to dirty inunction. But mercurial fumigation is best. He did not believe that the hypodermic method would come into general use.

Dr. Bermann did not question that syphilis could be cured without hypodermic injections, but the latter have many advantages over the other methods. The bichloride of mercury has been shown by recent experiments to be the best of all disinfectants, one part in 500,000 being sufficient to destroy the spores of bacteria. By hypodermic injection we introduce the drug directly into the lymphatics which are the especial seat of the syphilitic virus. Recently he had had under care a case in which thirty-six injections had been given without leaving any traces. He had frequently seen cases in which the remedy did

not agree when administered by the stomach. He had had a large experience in the method in the hospital of Frankfort, under Knoblauch, also under Von Rhinecker of Würzburg and Zeissl of Vienna. Its only disadvantages are the slight pain—sometimes more, sometimes less—which it causes.

Mercury is absorbed from the stomach as an albuminate. It exerts a chemical effect on the walls of the stomach and intestines, when administered by that method.

SPECIMEN OF VESICAL CALCULI.—*Dr. Tiffany* presented some specimens of stone removed from the bladder. The first was of uric acid, and was extracted by the operation of lithotomy one week ago. The second was removed by crushing and washing out—Bigelow's method. The patient, a man, æt 47, weighed about 250 pounds, and had had symptoms of stone for three years. Just before the operation he was passing his urine about every thirty minutes. The stone was very hard, breaking with difficulty and disabling one lithotrite. Its weight was about 800 grains dry. The nucleus was also very hard. The patient was three hours and twenty-five minutes under chloroform, the longest time on record in lithotomy. The result was satisfactory, the patient going home the day week after the operation. The evacuation tube was a No. 24 or 25 French. Chemical analysis showed that the calculus consisted of uric acid with an oxalate of lime nucleus.

EDITORIAL.

THE SEWERAGE SYSTEM OF BALTIMORE.—In an inaugural address to the City Council of Baltimore Mayor Whyte took occasion to refer to the present sewerage system and bad sanitary condition of the city. In the course of his remarks he says: "We have been advised that our city is honeycombed with cesspools, the earth polluted with foul

odors, and the drainage of our city utterly inadequate to our wants. A proper system of sewerage, devised by scientific experts or approved by experience elsewhere, must be adopted as soon as practicable, and it seems to me a problem easy of solution."

Attention has been directed by our new mayor to a subject of great importance. This question of sewerage is one which invites careful study and consideration. To adopt a system which will meet the wants of a large and rapidly expanding community is not an easy duty. Experiments have been tried by several large municipalities, which have resulted in large expenditures of money, great inconvenience to property owners, and but partial success in the accomplishment of the purposes aimed at. On this question of sewerage a variety of opinions prevail. Sanitarians have theories which differ widely as to the plan of construction, system of working, and mode of conducting enterprises having in view the disposal of sewage and drainage. Before adopting a system for Baltimore the City Council very wisely provided for a study of the various systems in use in other municipalities. A competent civil engineer was selected to report upon a plan of sewerage and its probable cost, and to report the same to the Mayor and City Council. Mr. C. H. Latrobe, C. E., of this city, was appointed as engineer under a resolution passed February 8th, 1881. We have now before us Mr. Latrobe's report, a document prepared with unusual labor and skill. This report presents facts of much value to those interested in the study of sanitary questions. Attention is first directed to the present sanitary condition of the city and to the cesspool system in use here. Reasons are given why the cesspool system should be abolished.

These are briefly stated as follows:

1. Cesspools gradually pollute the soil, and the soil upon which Baltimore stands is generally permeable in its character, as shown by the condition of pump water and spring water taken from different sources in the city limits. Mr. Latrobe says: "When it is considered that there are some 80,000 of these privies in the city—many of them only from six to

eight feet deep—we can readily understand how and why the entire subsoil of the city is being poisoned.” 2. The pollution of the soil by cesspools leads to a large percentage of the pollution of the Falls and harbor, the subsoil waters with the contents of the soil ultimately finding their way there. 3. The germination of gases from cesspools is offensive and dangerous. 4. The contents of the cesspools must ultimately be removed at a cost to the city of \$96,000 per annum. 5. Many cesspools connect either directly or by means of overflow pipes, with such sewers as we have now, which were never intended for such a purpose. These sewers emptying into water-courses pollute the waters.

The objections above stated are convincing arguments as to the necessity for reform in our sewerage system.

Mr. Latrobe asks the very pertinent question, “What system shall we substitute for the cesspools? With our abundant present and prospective supply of water it seems scarcely worth while to investigate any but the water-carriage system with its complete net work of sewers.” Quoting from Col. Geo. E. Waring, in his “Sanitary Drainage of Houses and Towns,” he says: “We may, therefore, conclude that an efficient water-carriage system is the best possible method, based upon the fact that it is the only system by which the instantaneous and automatic removal of excrement and house drainage from the premises can be obtained. It must be noted in this connection that the kitchen slops and drainage from sinks and bathtubs, which now form the staple flow of our gutters in dry weather, will all be turned into sewers under the water-carriage system; and that the only street and gutter flow will be that from rain storms.”

The two systems of water-carriage, viz., the combined and separate, are next discussed. The combined system provides a single system of sewers for house sewerage and storm water also. The separate system provides two sets of sewers, one for sewage proper, the other for storm water alone. The features of these two systems are considered at some length. Examples are given of

cities using one or the other of these systems, from which number Mr. Latrobe cites Memphis, Tenn., as the most recent example of the separate system in this country—a system said to combine all the latest improvements. Mr. Latrobe made a personal examination of the Memphis system. He gives a description of the same, its mode of action, cost and general adaptability. At the date of writing over 20 miles of sewers and 125 flush tanks are at work in Memphis. The total cost has been \$137,000, or \$6,850 per mile. In summing up his impressions of the Memphis system Mr. Latrobe says: “It is well planned and well executed, and fully answers the purpose for which it was intended, and which I conceive to be primarily the object of all sewerage, viz: to carry off all human and industrial waste, with rapidity and cleanliness, to its ultimate destination.”

Having studied the separate system at Memphis, Mr. Latrobe next examined the combined system in use in New York, Brooklyn and Providence. The plans and workings of these systems in these cities are very carefully discussed.

The theory and practice involved in the two systems of sewerage—the separate and combined—having been carefully considered, Mr. Latrobe comes to the important question: “Which is the best system for Baltimore?” In answer to this question he says: “The separate is, therefore, the one which I would respectfully recommend to your Honors as the best adapted to our present and future needs.” The system being determined upon, Mr. Latrobe next discusses the outline of construction and its probable cost.

The total number of miles required, exclusive of the outfall conduit, which is nine and a half miles, he estimates at 317.3. Fifteen hundred flush tanks will be required. The total estimated cost \$3,198 667. Mr. Latrobe earnestly recommends “that in the event of the construction of a system of sewerage for the city of Baltimore, its complete and entire control, from its initiation to its consummation, be retained by the city and in perpetuity.”

This report deals with many questions

of importance, which want of space prevents us from noticing. It is a full, clear and complete study of the sewerage systems and will present to the student of sanitary science many facts of interest and value. We can only urge upon the profession in our city the importance of the subject which has been so ably and carefully presented by Mr. Latrobe. The sanitary condition of our city should receive immediate attention. As plans have been submitted looking to the adoption of a new system of sewerage, this system should receive a careful and critical study by those members of the profession who have given much thought to sanitary matters. We simply wish to bring the subject to the attention of our readers, and we have tried to offer a very brief notice of the main features of this report, which possesses, we believe, many points of merit.

THE BOSTON DIRECTORY FOR NURSES.—We have already alluded to the fact that such an institution had been put into successful operation in Boston, and the very great desirability of having a similar one established in this city. The publication of the "Report of the Committee on the Directory for Nurses, by Fred'k C. Shattuck, M. D., Chairman," brings the subject again to our attention, and furnishes a history of the enterprise up to a very recent date, of which we avail ourselves in order to point out briefly its methods and results.

In the first place it should be stated that this directory is believed to be the first of its kind ever established and hence the founders of it deserve not only the credit of originating it but of working out and successfully conducting all its details. The directory was established by the Medical Library Association, shortly after the latter became possessed of a building of its own, but not without pecuniary aid from persons outside the profession, and the active coöperation of several energetic ladies. The names of a number of competent nurses being obtained, these were invited to register themselves—the plan of operations having been explained to them. A small fee for registration was charged. All necessary information with

regard to the nurses was recorded and they were required to keep the office notified by postal of their entrance upon any engagement, change of residence, etc. The Assistant Librarian of the association is the registrar, and residing in the Library Building which is furnished with a night bell and telephone, he is always ready to answer calls for nurses, day or night. The expenses are borne by those securing the nurses who pay \$1 during the day, \$2 during the night for simple information as to the name and address, more when the nurse is sent to them. There is a demand now for nurses from all over the state and even beyond. "There are now 412 nurses registered of which number 366 are women, 46 are men, and 71 are graduates of a respectable training school. * * * The monthly average of the number of nurses furnished from January to November 1881 is 74." The demand is quite equal to the supply.

The successful example thus depicted can not fail of having imitators. Compare the facility with which patient or physician can almost at a moment's notice obtain a reliable and experienced nurse with the present unsatisfactory state of things existing in this community and who can fail to see the advantage of the organization here of an institution similar to that to which the people of Boston have had access for more than two years.

GIFT OF A MILLION.—The munificent gift to the city by Mr. Enoch Pratt, one of the wealthy merchants of Baltimore, of over one million dollars, for the founding of a free circulating library, is a subject for congratulation for all classes, and places the donor's name among those of previous benefactors—Peabody, Hopkins, Wilson, Shepherd, McDonough—whose life and labors are perpetuated in the noble institutions which adorn our city and suburbs. Is there not someone among us who will—out of the love he bears his profession—do something in this way to advance the medical interests of Baltimore? The much-needed medical hall, the library, the schools and societies, the relief of disabled medical men, their widows and orphans—afford a variety of

objects from which to select. What an impulse, for instance, would be given to our library—how greatly its usefulness would be enhanced by a bequest of \$100,000!

THE HEALTH COMMISSIONERSHIP—On the 27th of January, a committee waited upon Mayor Whyte to present a petition signed by a large number of the leading physicians of Baltimore urging the reappointment of Dr. James A. Steuart, the present Health Commissioner. We regret to say that the committee were not encouraged by what his Honor had to say and retired with the impression that the petition would not be successful. It is sad to think that an office of such vital importance to the health and welfare of a great city should depend upon mere political and personal considerations. It is not a question of fitness, character and ability but of service rendered, of party affiliation and support. The unanimity with which Dr. Steuart's professional associates have united in the appeal for his reappointment indicates better than anything else could his fitness for the position. It is safe to say that when a physician has the esteem and respect of his associates he merits it. The qualities which have distinguished the present incumbent it is true are not those which are likely to be most appreciated by the masses whose favors are most readily yielded to the familiar and obsequious politician, but it will hardly be questioned that no one could have discharged the responsible duties connected with the office with more dignity, zeal and intelligence than the present incumbent. The respect and consideration with which the position is invested are due in a very great measure to those high qualities of head and heart which are so conspicuous in his life and character. It cannot but be regarded in the light of a public misfortune should the trust devolve upon less worthy shuloders.

MISCELLANY.

PRECAUTIONS AGAINST THE SPREAD OF DIPHTHERIA.—All persons recovering from diphtheria should be considered dangerous; therefore, such a person should not be permitted to associate with others or to attend school, church or any public assembly until the throat and any sores which may have been on the lips or nose are healed, nor until, in the judgment of a careful and intelligent health officer, he can do so without endangering others; nor until after all his clothing has been thoroughly disinfected, and this without regard to the time which has elapsed since recovery if the time is less than one year. Nor should a person from premises in which there is or has been a case of diphtheria attend any school, Sunday-school, church or public assembly, or be permitted by the health authorities, or by the school board to do so, until disinfection of such premises and of the clothing worn by such person if it shall have been exposed to the contagion of the disease.—*Document issued by the State Board of Health of Michigan.*

A NEW METHOD OF PERFORMING OPTICO-CILIARY NEUROTOMY.—*Dr. Jos. A. White*, of Richmond, proposes the following plan of practising section of the nerves behind the eye-ball, the operation recently come into vogue for the prevention of sympathetic ophthalmia: A meridional incision is made through the conjunctiva and sub-conjunctival tissues from the upper border of the external rectus to the outer border of the superior rectus, thus exposing the sclerotic. A strabismus hook is then inserted under each of these muscles and with them an assistant pulls the eye down and towards the nose. A small lid elevator is then hooked under the upper lip of the incision and drawn up, thus making a large opening through which the curved scissors can be

A course of post-graduate instruction will be given at the University of Penna. during the coming spring.

passed behind the eye-ball and the optic and ciliary nerves cut. Knapp's double hook is then inserted into the posterior part of the sclerotic, and without any trouble the cut end of the optic nerve and its surroundings are exposed to view at the incision. The sclerotic is then carefully cleaned with the scissors—thus cutting away sections of the optic and ciliary nerves. As long as any blood oozes from the opening it is kept open. When this ceases a conjunctival stitch is put in and cold water dressing applied.—*Va. Med. Monthly*, Dec., 1881.

CEREBROSCOPY.—All important diseases of the brain and cord, also serious diathetic diseases may be recognized by the ophthalmoscope. Congestion and swelling of the optic nerve indicate congestion or compression of brain, meningitis or commencing spinal disease. Oedema of disc and neighboring retina shows oedema of meninges and obstruction to circulation in sinuses and meningeal veins, in tuberc. meningitis, in acute and chronic hydrocephalus, in cerebral hemorrhage, in certain cerebral tumors accompanied by encephalitis, etc. Retinal varices and thromboses indicate thrombosis of the sinuses and meningeal veins. Miliary aneurisms of the retinal arteries show miliary aneurisms of the brain. In fevers and diseases of the nervous system retinal hemorrhages indicate either compression of brain by copious effusion, hemorrhagic diathesis, cardiac obstruction to cerebral circulation, or changes in cerebral and retinal vessels caused by chr. albuminuria, glycosuria, syphilis and leucæmia. Miliary tubercles of retina and choroid show tuberculosis of brain or meninges. In nervous diseases, atrophy of disc or sclerosis of optic nerve always indicates a disseminated sclerosis of brain or anterior columns of cord.—*Bouchut, Int. Med. Congress.*

LACERATION OF THE CERVIX UTERI.

At a meeting of the *Obstetrical Society* of Philadelphia, held September 1st, 1881, Dr. John C. Da Costa presented an analysis of sixty-seven cases of laceration of the cervix uteri, which were, with one exception, not operated upon. These cases were examined during June, July and August, 1881.

The points upon which observations were made were: 1st. As to the *position* of the laceration. 2. As to its *direction*. 3. As to its *gravity*. 4. *Complications*. 5. *Symptoms*. 6. *Causes*.

1. *Position*.—All, with one exception, had one or more lateral tears; one was anterior only.

2. Two or three per cent. had a single tear directly to the right. Twenty-nine, or forty-three per cent., had a single tear directly to the left. Twenty-nine, or forty-three per cent., had transverse tears. Three, or four and a half per cent., had double tears nearly directly to the left. One was tri-lateral; one was antero-posterior through both lips; one had four tears; one had five tears. Of the total of sixty-seven cases, sixty-four, or ninety-six per cent., had one or more tears through the left side.

3. *Gravity* of the laceration.—Thirty-seven, or fifty-five per cent., were deep or very deep; twenty-one, or thirty-two per cent., were of medium depth, and nine, or thirteen per cent., were superficial.

4. *Complications*.—A lacerated perineum was present in thirty-nine cases; of these twenty-four were deep and fifteen were slight.

5. *Symptoms*.—There were the general train of symptoms of uterine disease; a wearing, dragging pain between the crest of the ilium and the internal abdominal ring was present on the left side in all but two cases; in one it was on the right side, and in one it was absent. The greater number of the patients had been under treatment for abrasions of the os, or "ulcers on the womb."

6. *Causes*.—It was very hard to get any clear or distinct history in the majority of cases. In those who had but one child there was generally a history of unskillfully-used forceps or the early employment of 'forcing powders'.—*Monthly Sup. Amer. Journ. Obstet.* for Jan., 1882.

MYXŒDEMA AND BRIGHT'S DISEASE.—*Dr. F. A. Mahomed*, in the *Lancet* of December 24th, gives his views as to "The Pathology and Etiology of Myxœdema." He has collected twenty-seven cases for study. In fifteen of these there was albuminuria or other good evidence of Bright's disease during life. In three out of four, which proved fatal, post mortem examination revealed granular and more or less contracted kidneys. He feels warranted in believing that the condition is one of chronic and organizing œdema occurring most frequently in the subjects of Bright's disease and occasionally in other more rare conditions. This view is not inconsistent with the existence of a normal urine, an apparently solid œdema and the presence of certain nerve symptoms. The author has collected as many as twelve cases of Bright's disease, in which the urine was always, or nearly always, normal. In two of them the œdema was chronic and did not retain the impression of the fingers; they had also the characteristic nervous symptoms. It is well to add that the author applies the term chronic Bright's disease to cases of arterio-capillary fibrosis in which the kidneys may or may not be granular, only about thirty per cent. of which die of nephritis.

OVARIAN COMPRESSION.—*Gowers* throws doubt upon the influence of the compression of the inguinal region in developing and terminating hysteroid attacks as claimed by *Charcot*. In his experience the attacks can scarcely ever be thus induced, and although they may sometimes be arrested by this means, the effect is not sufficiently constant to possess any diagnostic value. In patients with ovarian tenderness, compression of the ovary may produce evident distress, choking sensations and even the feeling by which attacks of hysteropilepsy are heralded, but he has never

known such pressure to produce an actual attack.—*Lancet*, Dec. 31, 1881.

SALICYLATES AND ACUTE RHEUMATISM.—*Dr. Donald W. C. Hood*, in the *Lancet* of December 31st, gives an analysis of several hundred cases of acute rheumatism occurring in Guy's Hospital, especially with reference to the value of salicylate treatment. Of 350 cases thus treated, 247 lost their pains within nine days, whilst of 350 others treated without the salicylates only 141 lost their pains within this period. But on the other hand the relapses in the former are vastly increased; they remain perceptibly longer under treatment, and are left feeble and exhausted after treatment. As to heart complications, a comparison does not show any advantage on the side of the salicylates but rather the reverse.

BALTIMORE MEDICAL AND SURGICAL SOCIETY.—ANNUAL BANQUET AND ELECTION OF OFFICERS—The eleventh annual banquet of the above-named society was held at Kelly's restaurant on the evening of January 25th. There was a large attendance of members and the occasion was greatly enjoyed. This society meets on every Wednesday evening in East Baltimore. It is in a very active and flourishing condition and numbers among its membership some of the best known physicians in the city. The society is doing a good work, and exerts a large influence. Its meetings are well attended and its membership is on the increase. The annual banquet was a success. As is usual upon such occasions a number of toasts were offered. They were responded to in a genial, humorous manner, many of the remarks eliciting much merriment. The following officers were elected for the ensuing year: President, *Dr. O. J. Coskery*; Vice-Presidents, *Drs. J. E. Michael* and *G. H. Rohé*; Recording Secretary, *Dr. C. S. Parker*; Corre-

sponding Secretary, Dr. G. F. Taylor; Reporting Secretary, Dr. J. H. Branham; Treasurer, Dr. R. W. Mansfield; Executive Committee, Drs. J. H. Scarff, W. Brinton and Charles Morfit; Committee on Honor, Drs. A. B. Arnold, E. M. Reid and W. H. Norris; Committee on Lectures and Discussions, Drs. J. W. Chambers, W. Billingslea and John Monmonier.

ACCORDING to the *Medical News*, whilst the schools of New York and Philadelphia had proposed a fee of \$20 for endorsing the diplomas of graduates of schools outside their respective States in accordance with the medical registration acts, the Philadelphia schools have not so far received any fees for such service. Further, that the medical schools of the latter city are organizing an effort to have this section of the law modified, regarding it as offensive and unjust for the Faculty of a medical school in that State to sit in judgment on the qualifications of a medical man attested by the signatures of a Faculty in good standing in another State.

ENDOWMENT OF MEDICAL SCHOOLS.
—The objects of endowment in medical education are precisely the same as in other departments of education, namely, to provide permanent means of securing the most competent persons for its professorial chairs, of helping poor students of rare capacity, and of advancing knowledge by new researches. It is the primary object of medical science and art to defend and improve the life that now is—the life of the individual, of the family and of society; but since it is impossible to separate physical from mental and moral well-being, the domain of medical science is really coextensive with human nature. Whatever motives induce benevolent persons to endow institutions which teach the humanities or theology should also avail for the

endowment of medical education. The seed and the fruit, the planting and the harvesting, may be different in kind; but these various cultures all have in view a common end, namely, the improvement of man's estate. —*Bost. Med. and Surg. Journ.*, Jan. 19.

ERYSIPELAS IN A LYING-IN WOMAN WITHOUT PUERPERAL FEVER.—*Dr. Norman Bridge*, in *Chicago Med. Jour. and Ex.*, Jan., 1882, reports the case of a nervous woman, *æt.* 40, whose labor was normal. The next day she complained of a burning sensation on her nose, and a small spot of erysipelas was observable there; p. 84, t. 102°. The surface was painted with collodion, carbolized vaginal injections and sulph. cinchonidia gr. ii every two hours were ordered. The erysipelas spread rapidly, and by next day covered the nose, both cheeks and upper lips. Pharynx was inflamed, and there was pain in swallowing. On the third day the inflammation had extended to forehead, scalp and ears. The tinct. of iron was ordered in small doses, but was abandoned on account of gastric irritability. On the fourth day there was slight tenderness over the region of the uterus, and the lochia were slightly *fœtid*; these symptoms had disappeared by the fifth day, the erysipelas had ceased to spread and had commenced to fade away. Recovery was rapid without other unfavorable symptoms. There was free exfoliation of cuticle. In ten days after confinement the patient sat up as though no complication had occurred.

ODORLESS IODOFORM.—The odor of iodoform is very much disguised by the presence of the volatile oils, such as peppermint and cloves, and also by balsam of Peru. Five to eight drops of the oil of fennel to the gram of iodoform is considered, however, to be the most effectual.

SOCIETY BULLETIN.—*Clin. Soc. of Md.* will meet Friday, Feb. 3rd, 8 P. M. Dr. Morison on "Iodine as a Substitute for Cinchona in the Treatment of Malarial Diseases."—Feb. 17, Dr. Morris, on "Some Observations on Bovine Vaccination." *Acad. of Med.* will meet Tuesday, Feb. 7th, 8.30 P. M. *Obstet. and Gynecol. Section, Med. and Chi. Fac. of Md.*, will meet Friday, Feb. 24th, 8.15 P. M. Dr. Williams on "Ergot;" Dr. Browne "On the Treatment of Amenorrhœa by Electricity." *Ophthalm. and Otol. Section, M. and C. F. of Md.*, meets 1st Wed. in each month. *Med. Ass'n* will meet Monday, Feb. 14th, 8 P. M. Dr. Dickson on "Cerebral Rheumatism." *Med. and Surg. Soc.* meets every Wednesday, 8.30 P. M.

MEDICAL ITEMS.

THE National Board of Health has declared small-pox to be epidemic in the United States; therefore, the special fund of \$100,000, which was only available in the event of an epidemic can now be utilized.—The annual commencement, University of Maryland, School of Medicine, will be held at 12 M., Wednesday March 1st, at the Academy of Music. Prof. I. Edmondson Atkinson will deliver the address to the graduating class.—It is a fact not disputed that the majority of cigarettes are not only made of the most inferior tobacco, cigar stumps from syphilitic mouths and filthy gutters, but that both paper and tobacco do contain much poisonous drug adulteration.—*Med. and Surg. Reporter*.—Dr. J. Lewis Smith finds a solution of liquor potassæ and lime water, 2 parts of the former to 40 or 50 of the latter, the best solvent of diphtheritic membrane. Dr. Elsborg finds bromine, 1 grain to the ounce of water, better.—*Med. Gaz.*—The commencement of the College of Physicians and Surgeons will be held

at the Academy of Music, on Wednesday, March 1st, in the evening. Ex-Mayor A. M. Keily, of Richmond, will deliver the address to the graduates.—The Surgeon-General's Library has 54,000 volumes; that of the College of Physicians and Surgeons, of Philadelphia, 22,419.—Two women were recently delivered in Cincinnati before a medical class of 360 students.—Lowenberg incises boils and then applies a solution of boracic acid. When recent, and incision is refused, the latter alone arrests their development.—The University of Pennsylvania proposes to establish a school of veterinary medicine, with an accessory hospital for domestic animals; also a training school for nurses.—A vigorous effort is being made by Oliver Wendell Holmes and others to secure an endowment for Harvard Medical School. \$500,000 is the amount named. The effort will doubtless be successful. The regular course of four years will then be made obligatory upon all its graduates.—Dr. John W. Draper, the well-known physiologist and author, died on the 4th ult. near New York, aged 70.—Dr. D. Warren Brickell, of New Orleans, died Dec. 12th, aged 54.—Female practitioners are admitted to membership in the Philadelphia County Medical Society.—The Medical society of Virginia has adopted a resolution to petition the Legislature to establish a State Board of Medical Examiners.—Dr. Wm. J. Morton, of New York, has purchased the *Journal of Nervous and Mental Diseases*, and will assume sole editorship of it.—Since 1871 Harvard Medical School has received by gift and bequest \$270,000.—Lawson Tait has a book in the press.—The Pennsylvania Railroad Co. requires a certificate of vaccination from every laborer in its employment.—The City Council of Richmond has passed—over the Mayor's veto—an ordinance requiring all persons, not vaccinated within 12 months, to be vaccinated.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

SOME POINTS IN THE TREATMENT OF FRACTURES.

BY OSCAR J. COSKERY, M. D.,

Professor of Surgery, College of Physicians and Surgeons.

(Read before the Baltimore Med. and Surg. Society, Dec. 21st, 1881.)

In the whole domain of surgery no other subject can have for the general practitioner the same interest as fractures. Bones have been broken from the commencement of animal life upon this earth, are now broken daily and hourly, will continue to be broken to the end of time, and perhaps the first case seen by the *young* medical man, and the last seen by the veteran, will belong to this class. But my purpose to-night is only to call attention to one portion of this great subject—the treatment—and to discuss some points in connection therewith. Notwithstanding the many cases that occur, notwithstanding the similarity of symptoms and of the indications for treatment, how differently do medi-

cal men go about managing fractures. Even in the discussion of the subject in text-books what diversity of opinions! One author treats the subject as a mere bagatelle, and with the gay Bohemian, Joe Atlee, in Lord Kilgobbin, would consider them (fractures) the “pot-hooks and hangers of surgery,” while others, and amongst them I prefer to rank, look upon the subject with the same feeling as does that Nestor of American surgery, Gross, when he says: “If I were called upon to testify under oath what branch of surgery I regarded as the most trying and difficult to practice successfully and creditably, I would unhesitatingly assert that it was that which related to the present subject” (fractures). Starting out with this belief, then, it seems to me that every word that may possibly conduce to the simplification of treatment, unification of methods, and perfection of result, should be said. I have, therefore, no hesitation in submitting for discussion the following:

1. When should we set a limb?
2. Should we use chloroform for that purpose?

3. How should we go about setting the fracture?

4. What are the indications of successful adjustment?

5. What constitutes the best possible apparatus?

6. When, and how long, is confinement to bed necessary?

7. What about passive motion?

8. How long shall splints be left on?

First—When shall we set a limb? There can be but one answer—*at once*. What do we gain by waiting? The fragments, uncontrolled, constantly assuming bad positions, necessarily irritate the soft parts, and by so doing increase the pain, swelling and secondary inflammation. By placing the fragments in as good position as possible, the source of all this discomfort is reduced to a minimum at least. Again, the equable pressure of a properly applied apparatus tends, by preventing further exudation of blood, to decrease the swelling. The suggestion to wait until the swelling subsides does not hold if, as is certain, this very swelling is added to by the bad position of the fractured ends. And while we are waiting for this subsidence of swelling, what pain does not the overriding of fragments give to the patient. Therefore, to recapitulate, set all fractures *at once*.

Secondly.—Shall we give an anæsthetic in order to set a fracture? In answer to this question I would say that I have done so three times only, and have regretted it each time. It is better, in my opinion, to give a little more time to the individual case and gain the confidence of the shrinking child or timid woman, than to run the risk of having the fragments forced through the soft parts, as I have myself seen, in the stage of excitement. Still, I will not say, that in the cases of persons who are peculiarly susceptible to pain, the use of anæsthesia is to be ignored. In adult men, or in the *phlegmatic*, (whatever that

means) gentle manipulation will never give pain of any moment—or at least not sufficient pain to require an anæsthetic.

Thirdly.—How should we go about setting a fracture? This would probably be answered by saying that “the setting would vary as the limb or site of the fracture.” But the *principles* governing reduction do not vary, —the details do.

The principles of setting a fracture are “to place the fragments in as nearly as possible the condition occupied by them before solution of their continuity took place, and to keep them so.” The means, as by splints, plaster, etc., I can, of course, only allude to; but the diversity of methods adopted by different medical men to make a patient comfortable is something remarkable. Some few years ago a man was received into hospital whose right leg had been broken in the middlethird. A bandage had been tightly applied from the ankle to above the knee, and over this an anterior splint. The cold, bluish condition of the neglected foot gave earnest of what another twenty-four hours would have developed. Again, an old lady fell, producing a compound fracture of both bones of the forearm. A bandage had been applied, and over this a thin piece of pasteboard extending from the wrist to five inches up the forearm. I mention these two cases because they were so flagrant; but anyone in extensive hospital or dispensary practice must have met with many such. In these cases the worst feature was the bandage beneath the splints. But, some of you may say, “we were taught to do thus”—and so was I; but is that the only foolish thing you or I were taught? Does not each succeeding generation of medical teaching explode some dogma of its predecessors? And is it not thus that our noble science expands? It was said, formerly, that the bandage, applied directly to the

limb, prevented swelling. How? The first swelling after fracture is undoubtedly due to hemorrhage from the vessels torn across at the time of disruption. Can a bandage prevent or control this in any degree by making pressure on the soft parts? Most certainly not. The application of such a bandage is irrational, unnecessary and dangerous, and it is remarkable that the forcible arguments made use of by such teachers and masters of our profession as Mr. Erichsen and Mr. Gamgee have not, long ago, succeeded in banishing such treatment. Although we cannot prevent this primary swelling, we can do much towards regulating its amount by at once placing the broken ends of the bone in good position and making steady pressure over some yielding substance which, giving gradually before the consecutive swelling, will not tend to constrict but to really and truly compress.

All the appliances necessary, then, for putting up any fracture of the limbs are, plenty of cotton-wool or old rags to thoroughly envelope the limb, or to line the splints, a straight piece of thin wood, a little wider than the fractured member, and long enough to embrace the joint at either end of the broken bone, if thought necessary, and a bandage sufficiently long to encircle the splint, and contained limb. As to whether we shall continue this plan of treatment to the end of the case, or not, remains for after consideration, but it certainly is sufficient for a first dressing, and to make the patient comfortable. Another mistake sometimes made is the amount of extension kept up while applying the dressings. In old persons, or in those of lax tissues, it is quite easy to too widely separate the fragments. Only such an amount of extension should be used as would allow the fractured ends to fall into good position.

Fourthly.—The indications of successful adjustment of the fracture are the relief of pain, absence of deformity, and, if the fracture is a compound one, arrest of hemorrhage—if a simple fracture the non-increase of the swelling. Of these signs the first is the most certain, and, until achieved, the apparatus should be applied again and again.

Fifthly.—What constitutes the best possible apparatus for the treatment of fractures? I suppose it is hardly necessary for me to reiterate my so often declared preference for some variety of the *movable-immovable* apparatus, whether this consists of the starch or plaster of Paris apparatuses or of the "plaster splints." For the leg, middle of the thigh and upper arm, if you choose, I prefer the latter in all adults that can be rationally controlled. This I do not hesitate to put on at once, and I confidently predict that if prejudice can once be overcome, it will sooner or later come to be the recognized plan of treatment. If we remember that all that is required is to keep the fragments quiet while nature does her work, and that this can be done with a light apparatus, the cumbersome and special apparatuses must, for at least the majority of fractures met with, certainly for all simple ones, be discarded.

Sixthly.—In what cases is confinement to bed necessary? (Permit me to state here that in all the remarks I am making, I suppose that I have an *adult man* to deal with). Perhaps all fractures will require rest in bed for a day or so, except those of the jaw, forearm and hand. But very often this rest is not so much due to the fracture as to other injuries received at the time. The question, however, has to do with confinement in bed, say for a week or so. To give an instance: Is it advisable to keep a patient long upon his back for simple fracture of both bones of the leg,

of the thigh below the middle third, or of the upper arm, even though comminuted? I think not. It is not only injudicious, but, as unnecessary confinement to bed is always harmful to the general economy, so, also, is it to the injured point—the seat of fracture. In reference to the above I request that I be thoroughly understood as referring only to uncomplicated fractures. By the use of the light apparatus above suggested the fragments can be kept in good apposition. What more can we gain by rest in bed? Again, confinement to bed, especially in elderly persons, is apt to produce hypostatic congestion—either cerebral or pneumonic.

Seventhly.—When shall we employ passive motion in fractures near a joint? There is no doubt that many bad results referred to the anatomical position, such as the neighborhood of the elbow or knee, is more due to injudicious interference of the surgeon than to such position. There is a foolish bugbear in surgery known as *ankylosis*. This pathological condition requires time for its manifestation, a longer time than is required for the formation of sufficient callus to support the fragments. Stiffness of the joint is, however, more apt to follow fractures occurring in the gouty or rheumatic, and in such persons we should prepare for the contingency by putting the limb in the best possible position for it to occur—more than a right angle in the upper, nearly perfectly straight for the lower extremity. I am glad to be able to state that I have never yet seen a case of *ankylosis* in my own practice, while I have never used passive motion until the callus was firm.

Eighthly.—I now come to the most difficult question of the series: How long shall the splints be left on? One way to answer this is as follows: The limb having been left up a moderate time, as laid down in text-books, should be released, and then if at intervals of

two or three days several careful examinations are made and no movement can possibly be detected, we are safe in discarding all mechanical appliances. But these repeated examinations are necessary, for I have myself seen cases in which a callus, not allowing motion at first, did afterwards soften, and deformity ensue. But, to follow the rule as laid down in the text-books, perhaps it is well to fix some definite time for taking off the splint. The rule here should be not so much to consider the individual bone or bones, as the amount of soft parts surrounding them, but their position, so far as the amount of work that will be thrown upon them. Again, the young, vigorous adult will surely repair more rapidly than a person suffering from any of the cachexias, or one weakened by excesses of any kind. Still, in the great majority of cases, we can lay down the following as, perhaps, the proper lengths of time required. It differs from those given in the books: Five weeks for the lower jaw, ribs and clavicle; six for the forearm; seven for the upper arm and leg; and at least eight for the thigh. These rules, of course, only apply to simple fractures occurring in the robust. For compound fractures from half as long again, to fully double the time, should be given. To recapitulate:

1. Set at once.
2. Never use chloroform if it can be avoided.
3. All that are required in setting a limb are delicate manipulation, well-padded pieces of stiff material and a roller.
4. Absence of pain, of deformity, and of hemorrhage in compound fractures, are signs of successful adjustment.
5. The movable-immovable apparatus, as exemplified in the plaster of Paris *splints*, is, perhaps, the best form of apparatus for the great majority of fractures.

6. Confinement to bed over twenty-four or forty-eight hours (except for the thigh) is rarely, if ever, necessary in uncomplicated fracture.

7. Passive motion is apt to do more harm than good.

8. It is better to keep the mechanical appliances, the splints, on too long than for too short a time.

Before concluding this paper I beg leave to call attention to a point in the diagnosis of fractures, but most especially of those fractures in which, because of impaction, crepitus deformity and mobility, are, at least to an extent, lost. In these cases we are advised to measure the limb, and compare with the sound side. From a large number of observations, extending over several years, I am satisfied that measurements of the different sides of the body, with the expectation that they will be the same, is a mistake. In a large majority of persons who are right-handed or who have never served as soldiers, the right leg will be found to be from $\frac{3}{8}$ to $\frac{5}{8}$ of an inch longer than the left. Thus, if we use Bryant's triangle to discover whether we have a half-inch shortening or not, we should remember this fact of the usual difference in length.

TWO HUNDRED AND FIFTY CASES OF MALARIA TREATED WITH THE TINCTURE OF IODINE.

BY ROBERT B. MORISON, M. D.,

Lecturer in the Spring Course and Chief of Clinic, Medical Department of University Maryland, Visiting Physician to Union Protestant Infirmary, Physician to St. George's Society, etc., etc.

The use of iodine in the treatment of intermittent fever is by no means new. Stillé and Maisch in their dispensatory under the head of iodine and its medical uses say: "In intermittent fever iodine displays decidedly curative virtues both in tropical malarial regions and in those

"of temperate zones. The tincture "has been given in doses of from five "to fifteen minims largely diluted."

Other authorities have borne the same testimony so that there is no doubt of its efficacy. What I wish to do is to compare it with cinchonidia to see if in its action it is as sure and it may seem somewhat astounding when I make the following statement, viz: The tincture of iodine equals if it does not surpass cinchonidia in its action in acute malaria.

Some months ago Dr. Sadtler suggested trying the iodine at the University of Maryland Dispensary, and, acting upon this suggestion, every case of malaria which had a distinct history of a chill and fever during the past year, 1881, which presented at the dispensary, has been put upon the tr. iodine.

Dr. J. Homer Hoffman has kindly assisted in keeping the record of cases, and but for his help it would have been impossible to have done anything in the matter.

Theoretically one would expect iodine to be a good remedy in malaria. It acts energetically upon vegetable life and is even more hostile to animal life. In histology it is one of the best preservatives.

The theory of the cause of malarial diseases has of late years been quite thoroughly investigated. Klebs and Tommasi-Crudeli in 1879 published a pamphlet in which they announced the discovery of the bacillus malarie in the marshes about Rome. These experiments seemed quite conclusive, but since have been rather negated by those of Dr. Sternberg, surgeon, U. S. A. These latter experiments were made here in Baltimore at the Johns Hopkins University and in New Orleans in 1880 and 1881. Dr. Sternberg made the same experiments as those of Klebs and Tommasi-Crudeli, but came to a different conclusion as to there being a bacillus malarie yet discovered. These are some of his

conclusions: "The evidence upon which Klebs and Tommasi-Crudeli have based their claim of the discovery of a bacillus malarie cannot be accepted as sufficient; (a) because in their experiments and in my own the temperature curve in the rabbits operated upon has in no case exhibited a marked and distinctive paroxysmal character; (b) because healthy rabbits sometimes exhibit diurnal variations of temperature (resulting apparently from changes in the external temperature) as marked as those in their charts; (c) because changes in the spleen, such as they describe, are not evidence of death from malarial fever inasmuch as similar changes occur in the spleens of rabbits dead from septicæmia, produced by the subcutaneous injection of human saliva; (d) because the presence of dark-coloured pigment in the spleen cannot be taken as evidence of death from malarial fever inasmuch as this is frequently found in the spleen of septicæmic rabbits." Further on Dr. Sternberg says: "While, however, the evidence upon which Klebs and Tommasi-Crudeli have based their claim to a discovery is not satisfactory, and their conclusions are shown not to be well-founded, there is nothing in my researches to indicate that the so-called bacillus malarie or some other minute organisms associated with it, is not the active agent in the causation of malarial fever. On the other hand there are many circumstances in favor of the hypothesis that the etiology of these fevers is connected, directly or indirectly, with the presence of these organisms or their germs in the air and water of malarial localities."

Agreeing, then, with these investigators as to there being some living material introduced into the blood, which causes malaria, and knowing that iodine stops the movements of these infusoria and bacteria it seems rational to expect iodine to have a

decided effect upon the disease caused by them.

There is a theory that iodine is a very dangerous remedy to use on account of its effects on the glands, and especially upon the kidneys, but as yet it is only theory. We have no positive proof of any injury caused by it when given in proper doses.

In Wood's Therapeutics is the following on this subject: "As to the devastation, which it (iodine) was supposed to produce in the glands specially referred to, this has come to be regarded as one of the apocryphal facts of medicine. So many thousand physicians have now been prescribing iodine for so long a time, and such multitudes of patients have been kept under its influence for months and perhaps years without any accident of this kind having been observed, that there is every reason to believe that the instances which really have occurred of this apparent effect, were in fact simply coincidences."

Iodine is very quickly absorbed, so we have an explanation of its prompt action. It is, however, probably only found in the blood in a state of saline combination.

Having thus given a few reasons why it ought to be of use I will now show what it has actually accomplished at the dispensary. We have treated in the past year, 1881, in the medical department of the dispensary 4151 patients. Of these there were 490 malarial cases. Now having learned from former experience with iodine that it had no especial action on chronic malaria we only have used it in acute. So of these 490 malarial cases we have used it in 250.

The dose given has been invariably for an adult 15 minims—not drops—three times a day a quarter hour before meals largely diluted. The regular iodine mixture of the dispensary is made up with sugar and gum acacia and the dose of it is half an ounce containing the 15 minims. The

patients are always told to add it to half a tumbler of water. We give it to patients of all ages in proportionate doses and we prescribe as freely when there is any complication as we would cinchonidia.

The record of the 250 cases is as follows: Number cases not heard from after the first visit 150.

No. cases heard from a 2nd, 3rd or more times, 100.

Of the cases heard from, 84 are on record as cured, 2 cases not cured and 14 in which neither iodine or cinchonidia effected a cure. Cinchonidia is given in a regular "malarial mixture" at the dispensary and it contains in every one-half oz., $3\frac{3}{4}$ grains cinchonidia with the addition of $2\frac{1}{2}$ drops Fowler's solution.

I consider these 14 cases as the most discouraging part of the report and yet if they are considered separately we can readily understand why they were unsuccessful.

In the first place they were exposed to malarial influences from the position of their homes and in the second place they were in such a state of poverty and general anæmia from bad food and air that nothing but a change of these latter circumstances could have brought about a different result from any treatment. It is scarcely necessary to more than refer to such cases as all have met them in this region at certain times of the year. As they were first treated by iodine and then the malarial mixture—the latter in $\frac{1}{2}$ oz. doses every three hours—and neither effected a cure, we cannot blame one more than the other for the result. Let us return to the cases not heard from after the first visit. Dispensaries' statistics always show such deficiencies. However, as a rule, they are more likely to return if not cured than when they are. Few return to praise. The greater number return to complain.

If it had not been that we tried to impress the necessity of a return

on those upon whom we tried the medicine, we should not have heard from half of the 100 cases whose histories we have.

While keeping a record of the iodine cases we also kept one of those cases treated by the malarial mixture for neuralgia and cases of so-called dumb chills. Out of 240 cases we heard from 65, and we heard nothing from 175. The proof of the success of treatment may be somewhat reckoned by the increase or decrease in the number of patients. Our number has been steadily on the increase.

The cost of the iodine mixture is about one-seventh of the malarial mixture, i. e., it is seven times dearer to order malarial mixture such as I have described than the iodine. In 24 pints of iodine mixture the tr. iodine costs seventy-eight cents. The cinchonidia in the same quantity malarial mixture costs \$7.50. The most costly part of the iodine mixture is the sugar and acacia which, however, need not be added in large quantities. At the dispensary 24 pints of one or the other mixture have been used in about 2 weeks. The amount saved by using the iodine can be easily understood. Another factor in the expense saved in favour of iodine is that it never has to be ordered to be taken oftener than three times a day, whereas the malarial mixture containing $3\frac{3}{4}$ grs. of cinchonidia to the $\frac{1}{2}$ oz. must be given every three or four hours in a case of acute malaria.

So successful have we been with iodine we always order it now in intermittent fever of the acute sort. We give it to pregnant or nursing women; we give it where there is diarrhœa or constipation, and we have only heard out of these 250 cases from 2 where the chills have not been controlled by it. The dose is a pleasant one, and the opinion of the patients is decidedly in favor of taking it instead of the bitter malarial mixture. In only one case was nausea caused by it. In

this case the dose was decreased to one-half the regular dose and a cure effected. We had no case of iodism nor did we discover any albuminuria. The patients, as is natural after an acute disease, generally need a tonic, and this we always order in the form of iron or one of the bitters.

In conclusion, I will say the treatment is an established fact at the dispensary, and is carried out by the experience of others elsewhere and in private practice. Dr. Hoffman has tried it at the jail with success and is, after having seen it so often given, quite as much convinced as I am of its efficacy.

OBSERVATIONS ON THE PART THE OBSTETRICAL FORCEPS PLAYS IN THE INDUCTION AND PREVENTION OF PERINEAL LACERATIONS.

BY THOS. A. ASHBY, M. D.,

Lecturer on Obstetrics in the Summer Course
University of Maryland, etc.

(Read before the Obstetrical and Gynecological Section of the Medical and Chirurgical Faculty of Maryland, Jan. 27th, 1882).

The subject* announced for debate at this meeting is a very comprehensive one. It admits of a very wide range of study and discussion. I have thought it would not be unprofitable to concentrate attention upon a portion of the subject, and with this object in view will endeavor to present a few "Observations on the Part the Forceps Plays in the Induction and Prevention of Perineal Lacerations."

I wish to show the casual relation which this instrument bears to lacerations and how its proper use may prevent such accidents. It is a wide-felt belief that the forceps gives rise to a large proportion of the injuries of parturition. Perhaps no instrument of equal value to science has at

the same time been the means of doing the same amount of harm as the one under consideration. Baude-locque has said: "The forceps has been more injurious than useful to society." This opinion is still entertained by many observers and practitioners. Charges have been preferred against the forceps for offenses, which, if true, would condemn it as a relic of barbarism unworthy of professional confidence. As is often the case with useful things the instrument is capable of doing an immense amount of harm. In the hands of bungling and unskillful operators it has undoubtedly inflicted many serious injuries and destroyed many valuable lives. The prejudice against the instrument is, for the most part, well founded. The manual skill and gentleness required for its successful employment should be an earnest protest against its too frequent and coarse use in the hands of inexperienced and untrained men. To say that the forceps is chargeable for the ignorance and incapacity of those who often use it would be as unjust as to censure other valuable agencies we possess for the mistakes committed in their use, for which they are in no manner responsible.

It is safe to assert that we possess no instrument in medical or surgical practice which calls for the exercise of greater skill and study in its employment than the obstetric forceps. Therefore, its application, construction, mechanism, the various conditions calling for its use and the skill required in its manipulation, should receive careful and profound study. Few men would dare undertake the graver operations in surgery without a knowledge of anatomy or the essential principles of surgery. It is true, however, that many dare to deliver women with the forceps, who scarcely know the anatomy of the parts, the rules for applying the instrument, the force to be employed in delivering the head or even the principles upon

*The subject announced for debate was "The Obstetrical Forceps." The discussion was opened by Dr. John Morris, of this city.

which the instrument acts. Such must be the fact, otherwise how are we to account for the grave injuries which undoubtedly result from the use of this simple, efficient and safe mechanical aid. This instrument is not *per se* a dangerous one. On the contrary, when used with skill, it with ease, grace and efficiency accomplishes the duty required of it.

To understand this subject more clearly let us consider, first, the instrument; second, the injuries it may inflict upon the perineum; third, how these injuries may be prevented.

1. *The Instrument.*—The construction, size, shape and general characteristics of the different obstetrical forceps should be familiar to every physician. For convenience the instrument may be considered under two heads—the long and short forceps. The former is designed for use at the superior or inferior strait; the latter for the outlet. These two divisions embrace instruments with or without a pelvic curve and those with a pelvic and perineal curve, separate or combined. The obstetrician may employ but one or several of the different styles of forceps in his practice. If he is a man of large experience and skill he will, as a rule, limit himself to one of each style. With an instrument combining the main features of them all—such, for example, as Hodge's forceps—a good operator will be able to perform a successful instrumental delivery in the vast majority of cases met with in practice. However, in selecting a pair of forceps, the quality of the steel, construction of the blades, the pelvic and perineal curves, lock and handles, should be considered. A faulty instrument in the hands of a skillful operator may occasion embarrassment, if not serious harm. In obstetrics, as in surgery or any of the mechanical trades, neat work cannot be done with faulty or defective tools. There can be no question that delay and danger have

resulted in obstetric practice from the use of instruments not adapted to the work required of them. The great improvement in the invention and manufacture of the obstetric forceps has undoubtedly limited the number of accidents from instrumental deliveries.

The principles upon which the forceps is designed to act should receive careful study. When this is done an instrument should be selected which will admit of the application of these principles. The forceps acts upon three principles. 1st as tractors; 2nd as compressors; 3rd as levers. Traction is the force chiefly employed; with it may be associated compression and leverage. Injuries to the perineum result most commonly from traction. Compression can take but a limited part in the induction or prevention of ruptures. Leverage, however, may enter into the causation and prevention of accidents to the perineal body.

It is a well recognized rule of practice that traction should always be made in reference to the axis of the pelvis. When the head is at the brim traction should be made downwards until the head escapes through the superior strait. As the head descends the handles are carried forwards in a line parallel with the axis of the excavation. Traction applied in any other direction will in the majority of cases fail to overcome the object of resistance unless forcibly employed. "Forced traction," Dr. Goodell very well observes, "means uncontrollable traction," and it is to this employment of force and violence that we can attribute the majority of the injuries which result from the use of the forceps. Traction made in the right direction, that is in the axis of the presenting plane of the head will not as a rule—with few exceptions—require the expenditure of violent effort. It has been claimed upon good authority that a force of from 6 to 10

pounds is enough to expel a head which has been fixed for some hours. If it be understood that the chief danger to the perineum in the use of the forceps results from the employment of forced traction, it will be perceived how accidents happen to this body and how they may be prevented.

Briefly speaking the forceps is used to dislodge the head impacted at or about the superior strait, to supply the failure of uterine contraction, to overcome the resistance of the perineum or contractions at the inferior strait. Either of these conditions call for the exercise of skill and ingenuity in applying the instrument and in delivering the head without damage to the mother and child.

The methods of applying the forceps, the indications calling for its use and the special instrument to be used in each position of the head will not be considered in this paper.

2nd. *The injuries it may inflict upon the perineum.* It will not be denied that the forceps may give rise to serious injuries of the perineal body, either in the form of abrasions or lacerations. These accidents occur not infrequently and not without embarrassment and annoyance to the operator. At times they appear to be unavoidable and in defiance of practiced skill and experience. Accidents occur when the instrument is applied at the brim or at the lower strait. They occur when the head is at the brim from the employment of forced traction, from sudden slipping of the instrument or from backward pressure with the handles of the long straight forceps. Forced traction at the brim may induce a sudden descent into the excavation and before the operator has time to arrest his effort the perineal body is reached by the violent downward movement of the head. A strong and elastic perineum may arrest this motion or the force may be strong enough to break through the

membrane by direct rupture. This accident has happened to experienced men. The very possibility of its occurrence should be a warning against too violent traction or a braced effort which does not admit of an arrested motion of the operator's hands.

Sudden slipping of the forceps may give rise to the same accident. The instrument being applied to the head the operator takes it for granted that all is well, and forcibly draws upon the handles with all his muscle. The head refuses to budge, but the blades yielding their grasp suddenly precipitate the effort against the pelvic floor, and the soft parts sustain a force which either bruises or lacerates them. It will be clearly perceived that any force brought too suddenly upon the undilated or rigid perineum will most probably destroy this body. The proper adjustment of the forceps upon the head of the child and the exercise of suitable traction, when the head is at the brim, cannot be insisted upon too carefully. When the operator is using the long straight forceps at the brim he must contend with two difficulties. First, the instrument cannot be applied in the axis of the upper strait without pressing the handles too violently against the perineum and forcing it against the coccyx, thereby subjecting it to abrasions. Second, as traction cannot be made in the correct axis by reason of the prominence of the coccyx and resistance of the perineal body the handles are carried towards the symphysis and the blades are improperly adjusted. The operator must work to a disadvantage and incur the risks of accidents. The long straight forceps is not adapted to high forceps operations and, therefore, should not be used. The difficulty in applying the long straight forceps when the head was at the brim led to the important modification known as the "pelvic curve." The credit of this decided improvement over the

Chamberlen instrument is divided between an English and French obstetrician—Smellie and Levret. This variety was originally constructed to overcome difficulties at the upper strait or high in the cavity. Its employment is not, however, restricted to high positions. It will be found to answer equally as well at the outlet. There can be no question as to the superiority of the pelvic curve over the straight instrument, and it would seem useless to refer to its advantages were it not for the fact that the straight instrument still has its advocates.

I am of the opinion that the use of the straight forceps will almost invariably be attended with injury to the perineum unless applied when the head is very low down.

The short forceps without the pelvic curve has several advantages which make it popular with some obstetricians. The blades are easily introduced and applied to the position of the child's head, and it admits of easy rotation if it should be found necessary to alter the position of the head. These advantages are, however, equally enjoyed by the Simpson forceps, which possesses a very slight pelvic curve, and is so admirably constructed that it will meet all the indications present in a low forceps operation.

Recognizing the disadvantages of working with the long curved forceps in very high positions of the head Tarnier gave to the forceps a third or "perineal curve." The object of this curve is to enable the instrument to be applied to the head in the axial line of the excavation at any point from the upper strait to the outlet without pressing upon the perineum or being in turn influenced by it. It is claimed by those who advocate this instrument that traction is thereby made in the true axis and the operator is saved the necessity of changing the direction of the traction force so obvious in the use of the ordinary forceps.

In Tarnier's forceps traction is not made through the handles but by means of traction rods hinged to the lower curvature of the blades. The handles are allowed to follow the movements of the head, while the traction rods move in a line with the curved handles. The blades swing in the transverse diameter and the head follows as near as possible the axis of the pelvis.

The "perineal curve" has met with objection on the ground that, in the event of slipping, there is greater danger of wounding the perineum than with the ordinary forceps. This objection is met by the fact that this instrument is more easily applied to the head and the blades are more apt to stay in position, for if traction is made in the correct axis it is not likely to admit of slipping. Upon the whole then the perineal curve appears to be a decided improvement in the construction of the forceps designed for high and difficult operations, and its intelligent use will undoubtedly do away with those injuries to the perineum, which were likely to occur from pressure in the use of instruments lacking this feature.

The partial or entire failure of uterine contractions is one of the most frequent conditions calling for the use of the forceps. "Uterine inertia" may result from enfeebled or expended muscular power. The head may occupy a high or low position in the excavation. The forceps is needed to supplement the deficiency of uterine force. Traction becomes the main feature of its action. It most frequently happens that the gentlest force is required to deliver the head for it simply halts from a failure of the *vis a tergo*. The perineum is not greatly exposed to injury if cautious traction is used. He would be a clumsy operator who could not manage a case of inertia when all the conditions for easy delivery were present save the expulsive power of the uterus.

The next source of danger to the perineum, to which reference should be made, is where there exists a deformity at the outlet, either from a narrowing of the sub-pubic angle or forward prominence of the coccyx. The cavity may likewise be involved, for we may meet with every variety of malformation in the excavation. The forceps may be called upon to aid the downward progress of the head or to assist in its rotation or extension. Where the sub-pubic angle is narrower than it should be in the normal pelvis, approaching, as it were, the male type, the head is pressed against the face of the sacrum and descent is retarded. The forceps is frequently needed to bring the occiput behind the pubic arch and to extend the head along the floor of the pelvis. The head presses with more than usual force against the perineal body causing it to bulge and expand widely to admit of passage. In this condition gentle traction is needed to extend the face along the perineal surface. Undue force or a quick effort to effect delivery may be sufficient to overcome the already over-stretched perineal body and a tear will become inevitable.

By using the forceps as a gentle tractor or as a lever the movements of the head may be regulated in such a manner as to restrain a too violent expulsive effort. The perineum should have time to adapt itself to the pressure applied against it. Slow and gentle delivery will enable the operator to coax the head over the perineum and preserve it intact.

My first experience in the application of the forceps was in a case of a primipara who had a deformity of the character referred to. The pubic angle was very acute and the outlet contracted a half inch. The head of the child was large and compact. Labor pains were strong and regular. The labor progressed until the head reached the lower strait and meeting

resistance halted, and would proceed no farther, though the uterine effort was vigorous. Comprehending the nature of the obstruction I applied the forceps. Traction and compression were faithfully employed, and as skillfully as I then knew how (this was my second case of labor). In spite of all effort the head would scarcely budge from its position. Though aided by an elder physician of large obstetrical experience, we were over two hours in effecting a delivery of the child. Finally, to our great satisfaction, it was born alive with only a slight contusion of the scalp. The perineum, by a rare accident, escaped unharmed, for notwithstanding the great strain made upon it it dilated well, and the face was extended over it, making only a slight tear of the fourchette. This case was a most instructive one, and I have often thought of the damage which might have been inflicted upon a perineal body of less elasticity by the constant strain and manipulation of an inexperienced operator, as I then was.

The head is frequently arrested at the outlet by the resistance of the perineal muscles. Notwithstanding the most energetic contractions of the uterus its forces are not sufficient to overcome this resistance. The forceps is then applied to aid the uterine effort and to overcome this rigidity. Slight traction may be sufficient to extend the head and to draw it over the perineal border. Too much force is uncalled for, for it will rarely fail that the perineum will not gradually yield and admit of the passage of the head. Where the perineum bulges or is over-stretched it will not allow the head to extend as it should do in normal labor. A rupture of this body will possibly occur if the direction of the head remains unchanged, for the head advances forwards and breaks through a barrier which has not the power of changing its line of motion. In these conditions of the perineum the for-

ceps is invaluable, for it gives the operator direct control of the advancing object, enables him to change its line of motion and safely extend it over the dilated membrane.

The perineum should receive gentle pressure to enable the operator to regulate the amount of pressure he may employ in the forward extension of the head. It will be readily understood that clumsy movements or jerking efforts to extract the head will defeat any good purpose the forceps may render in conditions where the perineum is threatened. With gentle and skillful use I am of the opinion the forceps offers us the key-note to the prevention of many perineal lacerations. It gives the obstetrician such excellent control over the movements of the advancing head, assists so well in aiding the method which nature employs in effecting delivery that one can hardly question the propriety of employing it in threatened accidents to the perineal body. I do not wish to urge a more frequent resort to this instrument than is warranted by the rules of good practice, for I appreciate its great danger in the hands of ignorant and incompetent men. However, I am of the opinion that there is a wide range for its employment as a means of preventing perineal lacerations, and I would urge a more careful study of the perineum during labor with a view of determining when and how to take advantage of an instrument capable of rendering valuable services to skillful men.

In conclusion I would offer the following summary of the views thus hastily expressed:

1. The wide-felt belief that the forceps gives rise to many of the injuries of parturition is well-founded. Such accidents may result from the faulty application and use of the instrument in the hands of unskillful men. The instrument is not *per se* a dangerous one. On the contrary its value in preventing accidents is underestimated.

2. The design, quality of metal and construction of the instrument, resulting in an improper selection of a good pair of forceps, enter into the causation of accidents from its employment.

3. Traction is the chief force to be employed in manipulations with the forceps. It should be exercised with caution and gentleness, and always in the line of the axis of the pelvis. The excavation is a curved canal, and traction must be kept within the axis of this tube.

4. In high forceps operations the "pelvic curve" is essential to skillful application and delivery without undue risk of injury to the perineal body. The "perineal curve" is of equal service as it admits of traction in the axial line at any point from the brim to the floor without pressing upon the perineum.

5. The forceps gives the obstetrician perfect control over the head when arrested at the outlet. It may be used advantageously to rotate, extend or retard the movements of the head. By the exercise of this power the head may be made to execute the natural evolutions and thereby prevent undue injury to the perineum.

6. The conditions of the perineum during labor are entitled to more careful study with a view of determining when and how to apply the forceps.

A FEW OBSERVATIONS ON STATE REGULATION OF PROSTITUTION.

BY RICHARD H. THOMAS, M. D.

Two articles have recently appeared in the MARYLAND MEDICAL JOURNAL* on this subject both proposing acts to be passed by the State Legislature with a view to regulate prostitution and thus prevent the spread of venereal diseases in the community. One of

*See Maryland Med. Jour. for Jan. 15th and Feb. 1st.

these articles, which is the report of the special committee on the prevention of venereal disease to the American Public Health Association, suggests a merely tentative measure which could not accomplish its end and would only have the effect of accustoming the public to legislation on the subject; the other, the minority report, introduces the essential features of the European systems, though in a milder form:—thus it proposes the enforced periodic examination of women by physicians and compulsory confinement to the hospital of all found to be diseased. Legal penalties are attached to violation of these rules.

I propose to make a few remarks upon the general subject of the effect of legal regulations affecting prostitution. On this point the special committee seem very confident, for they speak of the encouragement they have received from the evidence laid before the special committee of the English House of Commons, which, they say, "shows conclusively the great advantage to society to be derived from the operations of legal enactments on this subject." Very well! but there is another side. I have before me over fifty printed pages of testimony taken in 1880† by such a special committee, in which Dr. J. B. Nevins shows, from officially published statistics, that the acts have not had the beneficial sanitary effect claimed for them. Sir William Muir will certainly not be accused of opposing them and yet his evidence shows that gonorrhœa has largely increased in the districts under the acts; that, while primary sores of all kinds (syphilitic and pseudo-syphilitic) have decreased they have not decreased in so rapid a proportion as in the six years before the acts were passed, and secondary syphilis has hardly

decreased one-tenth of one per cent;‡ that the proportion of secondary syphilis to primary sores is decidedly higher at the stations under the acts than in those not under them. "The amount of secondary disease in the 28 separate stations (19 under and 14 not under the acts) has no connection that can be discovered with presence or absence of the acts." *This is hardly conclusive evidence in favor of the legal regulation of prostitution.

Let us turn to the experience of Paris. Here we have at least the testimony of a man who was personally interested in the success of these regulations as he himself was the prefect of the police, and head of this department, M. Lecour.† He estimates the number of prostitutes in Paris who "on account of their habitual debauchery" were a danger to the public health at 30,000; of these only 4,000 could be brought under surveillance, and yet the police were active, for the average yearly arrests of clandestine prostitutes varied from 2067 to 3305. *In spite of all efforts, however, clandestine prostitution continued to increase and the number of those registered to diminish.* In statistics brought down to date (1881) and presented by Yves Guyot to the late meeting of the British, Continental and General Federation for the Abolition of State Regulation of Prostitution, the same state of things was proved to have continued. Further, these, as well as M. Lecour's statistics, show that while the number of registered prostitutes is diminishing the amount of syphilis among them is increasing. Thus in the five years ending in 1869 the average proportion

‡The act requiring periodical examinations was passed in 1866, but was not enforced at all the selected stations till 1870.

*Analysis of Sir Wm. Muir's tables, in "The Medical Inquirer," Liverpool and London, Nov. 1880.

†Quoted in an able article on "Compulsory Medication of Prostitutes by the State" in "Westminster Review," July 1876.

†Ordered to be printed by the House of Commons 10th of March, 1880.

per 1000 of this class found syphilitic was 106.953 per year while during the next five years it rose to 179.271, the most diseased being those who lived in the *maisons tolerees* and specially under the police control, they being examined weekly, whereas those in private lodgings are only examined once a fortnight. This proportion is actually greater than that found among clandestine prostitutes who were arrested during the second period that being 149.425 per 1000. Thus we see that the regulations could not stop the spread of syphilis and there is, says M. Lecour, an increasing number of clandestine prostitutes. These are peculiarly dangerous from the fact that they are forced to conceal their diseases for fear of arrest. But, if we turn to the number of men affected with syphilis and discover where they contracted it, we find rather surprising information. The total number of venereal patients in Paris (male and female) in 1868 is estimated by M. Lecour as being at the lowest 47,500. So much for stamping out of venereal disease by the police regulations. Besides, Dr. Fournier, the successor of M. Ricord at the Hôpital du Midi, found, that out of 873 cases of syphilis in males, 625 could be traced to public registered prostitutes.* The article in the *Westminster Review*, above alluded to, quotes Drs. Belhomme and Martin thus, "This guarantee is very insignificant, sad to say, so insignificant, even, that *syphilis is chiefly propagated by registered women*" (the italics are not ours). Other evidence to the same effect is produced in the same article.

Dr. Nevins† showed that the number of venereal diseases in seventeen large seaport towns in Great Britain, not under

the acts, is 3.7 per 100 patients; in Hamburg, which has had these regulations over 100 years, 11.15 per 100 in Christiania (under the acts) it is 24.97. In Dublin (not under them) 10.4; in Plymouth, (under them) 8.0 per 100.

What then can be said for the acts? On the continent they directly and indirectly have increased venereal disease, so that after years of inquiry the municipality of Paris voted last year to discontinue the support of the *Bureau des Mœurs* which administers them, on the ground that it was a proved failure.

In England, their effect has been to increase gonorrhœa and to leave secondary syphilis almost unaffected. The diminution in primary sores was occasioned by improved arrangements for the comfort of the men, sanitary regulations, etc., before the acts were passed, and, as we have seen, since the acts the diminution has been slower.‡ ||

What is the cause of this failure in the acts? The answer has been already hinted at. (1) The inability of the police, though armed with extraordinary power, as in Paris, to repress clandestine prostitution. (2) The difficulty of always diagnosing chancre in women even by experienced physicians.* (3) The opportunity for the disease to develop between the examinations. (4) The possibility of women with gonorrhœa

‡Ibid. question 104 &c. and diagram in appendix No. 2.

||Ibid. questions 109, 110; 438 to 449. In his answers to these questions Dr. Nevins allows that primary sores have not decreased quite as much in the "unprotected" districts as in the "protected;" but points out, that the external influences operating on the soldiery in the two classes are so different that they cannot be compared fairly except in the instance of Hounslow, not under the acts, and Windsor, under them. According to Sir Wm. Muir's tables, B and C, published as appendix No. 3 to printed Report of Special Committee, House of Commons, above referred to, the advantage is in favor of Hounslow. Dr. Nevins points out that the districts must be compared with themselves in order to judge.

*Thus Bumstead (3rd Edition, Phila., Henry C. Lea, 1874) p. 433. There are many cases, he says, where we may be unable to discover the initial lesion of syphilis owing "to the greater extent and depth of the genital organs and consequently greater difficulty of exploration in the female sex."

*See Lancereaux's work on Syphilis, quoted in "An Address to the American Legislature, &c." on this subject by the British Continental &c. Assoc. for the Abolition of State Regulation of Prostitution, and The National Medical Assoc. for the Abolition &c., London. F.C Banks, 2 Westminster Chambers, Victoria St., S.W., 1877.

†Printed Report of Special Committee of House of Commons, question 82.

concealing their disease for a time. (5) The greater number of men who consort with women in proportion to their numbers. One woman is reported who had in one day received twenty men. Of course, the women who are sent to the hospital leave fewer for the men, whose numbers do not decrease. Thus, if one of these women is diseased she will infect more men. (6) The greater number of people who are induced to indulge in irregular sexual intercourse under influence of the acts. (7) The non-examination and seclusion of men, as, if disease could be checked by only secluding one-half of those affected.† These are some of the reasons.

I think we have shown the moral side of the question incidentally in its true light. The enactment covers up but in reality only increases the amount of prostitution. In the "protected" stations in England when women find themselves diseased they often leave the district, and the report shows so many less prostitutes, and so an increase in the morality. (?) But how about the unprotected districts? They have an increase in prostitution. Let the acts, you say, be extended all over the country. Then you will have the large increasing number of clandestine prostitutes who will defy your police. The experience of the continent shows that public morality is fearfully injured by these regulations. Morality is not contemplated by them; their simple object is to make prostitution safe to *men*, and they fail.

The tendency of these acts is to become more and more stringent on the women till they become practically slaves unable to escape the clutches of the police. Again, in their practical workings, they lay innocent women open to be captured on suspicion of the police and to be forced often to criminate themselves. These and other evils have followed in the wake of such regulations, and must do so from necessity.

We see, then, that morality, hygiene and a right love of freedom unite, as they always do, for they cannot be safely

separated, to oppose any State regulation‡ of prostitution. Finally, is it sounder political economy or morality to license prostitution than to license gambling or thieving? Surely we must strike deeper than that.

The foregoing simply touches upon a few of the many points connected with this subject, and is designed just to indicate the line of the hygienic argument adopted by those opposed to the acts. It is their desire that nothing should be taken for granted, for, so confident are they in their position, that they simply ask for an impartial examination into all the facts of the case.

REPORTS OF CASES.

LIGATION OF THE FEMORAL ARTERY FOR FEMORAL ANEURISM.

BY O. M. SCHINDEL, M. D., CUMBERLAND, MD.

Percival R——, aged 34 years, clerk, when a boy 14 years of age, whilst carelessly handling a pocket-knife, accidentally thrust the blade into his right leg, puncturing the femoral artery. Violent hæmorrhage ensued, and when medical assistance was procured the patient was almost pulseless. A compress was applied, and under stimulants the patient rallied and recovered.

About one year after this accident the patient noticed a small, soft pulsating tumor at the point of injury, which was entirely disregarded until a few years ago, when he complained of pain about the knee and a dull aching sensation in the leg below the knee, with dilatation of the superficial veins and some swelling of the foot, for which condition he has been wearing a roller bandage, applied by himself, with much comfort. On the 17th

†Soldiers on entering protected districts in England are examined and, if diseased, are kept in hospital until well. This is not done in the other districts.

‡Notwithstanding the disclaimer in the article in the number of this JOURNAL for February 15th, I would respectfully submit, and I think all who will reflect will allow it, that regulation of prostitution implies the licensing of it.

of November I was called to see the patient, and upon examination found a large aneurism of the superficial femoral artery at the apex of Scarpa's space. There was great engorgement and dilatation of the superficial veins and hypertrophy of the muscles of the calf of the leg, superinduced by the tumor pressing upon the femoral and internal saphenous veins, thereby interfering with the return flow of blood.

The skin over the tumor was red-ened and inflamed and sensitive to pressure; the external wall of the sac was extremely thin and seemed as though it might rupture at any moment.

An elastic bandage was applied from the toes to above the aneurism, with the hope of relieving the engorgement of the vessels and supporting the walls of the sac until the patient could be gotten into a condition favorable for an operation and the inflammatory fever reduced.

After a week's treatment without any decided improvement in the condition of the patient, and upon consultation with Drs. G. E. Porter, of Lonaconing, Md., C. H. Ohr and Jas. M. Spear, of Cumberland, it was decided to operate—all the gentlemen present concurring in the opinion that it was the worst case of aneurism they had ever seen or ever expected to see, and the patient in an extremely bad condition for an operation, owing to the size of the tumor, which was as large as two fists, the already-existing phlebitis, the irritative fever and the highly inflamed condition of the tumor.

It was decided to ligate the artery above the aneurism, and on the 26th of November I operated with the assistance of the above-named gentlemen. The artery was tied about two and a half inches below where the femora profunda is given off. In drawing the ligature very tightly, which was of No. 9 silk carbolized, it cut through the vessel and hæmorrhage

ensued, but the patient did not lose more than two ounces of blood. Double ligatures of the same sized silk were then thrown around the vessel above and below, which controlled the bleeding; the wound was then closed, and the patient put to bed with the limb thickly enveloped in cotton wool and artificial heat supplied continuously by bottles of hot water. The patient got along well until the end of the third day, when gangrene made its appearance in the small toe, whence it extended to the entire foot and half way up the leg, where the line of demarcation was clearly established.

The gangrene was of a dry character. The patient's general condition was good, and everything pointed to a favorable issue, when, upon the ninth day, whilst the patient was quietly sleeping, sudden and profuse secondary hæmorrhage came on, and although the patient's sister, (a young lady of remarkable nerve) who was in attendance and had been instructed how to control the hæmorrhage, successfully held the bleeding vessel until medical assistance arrived, but the patient had lost so much blood as to preclude the tying of the artery higher up, or the amputation of the thigh. The patient died a few hours after from the effects of the secondary hæmorrhage.

Post-mortem examination revealed the fact that the clot, an inch in length, was lying loose in the artery above where the ligature had been applied, and that no inflammatory adhesion had taken place between the walls of the vessel and the clot owing to the diseased condition of the aneurismal sac and the artery above and below.

The external wall of the sac had sloughed out a few days previous to death, but no bleeding occurred. The deep walls were almost an inch in thickness and there was a calcareous deposit within the walls and on the inner surface of the sac. The artery

was very much enlarged in calibre and very fragile both above and below the aneurism.

SOCIETY REPORTS.

CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD JAN. 6TH, 1882.

SAMUEL THEOBALD, M. D., Vice-President, in the Chair.

CARTRIDGE SHELL IMPACTED IN A BRONCHUS. UNSUCCESSFUL TRACHEOTOMY—DEATH—POST-MORTEM—*Dr. Pearson* exhibited an exploded copper cartridge shell with the following history: A little girl five years old was playing with it and put it in her mouth, when it disappeared. On examination, shortly after, breathing was found to be normal except for large tracheal rales and slightly weakened vesicular respiration on the right side. There was nothing to be seen with the laryngoscope. She had previously been inverted without effect. Tracheotomy was, therefore, performed, and although the air-passages were freely probed and long forceps passed down, nothing could be discovered. During the vomiting incident to the chloroform she was again inverted but with no better result than before. The next day the attempt to find the shell was repeated but without success. Two days after the operation there was total suppression of breathing on the right side of the chest. The temperature rose gradually until on the sixth day it was 104° . The patient was much annoyed by fits of spasmodic coughing, during one of which death occurred suddenly on the seventh day. On *post-mortem* examination the shell was found impacted at the situation of the bifurcation of the primary bronchus on the left side. The anterior part of the upper lobe of the right lung was emphysematous whilst the lower lobes were hypostatically congested and pneumonic; at or about the bifurcation of the first bronchial branches were extensive ulcerations. The explanation, therefore, of the case was that the foreign body had first passed down into the right lung, where it produced inflammation and

ulceration. Being loosened by the latter it had been dislodged by a fit of coughing, and had fallen into the left bronchus becoming impacted in the situation where it was discovered. The right lung being disabled, the obstruction to the access of air to the left proved fatal.

Dr. Latimer read a paper entitled NON-IDENTITY OF CROUP AND DIPHTHERIA.—He maintained that not only was there a difference in the character of the membranes, but that the clinical histories were entirely distinct. He quoted freely the opinion of the leading pathologists in support of the first opinion and compared the symptoms and clinical histories to prove the latter. No case of diphtheria had come under his observation in which the membrane did not first show itself in the pharynx.

Dr. R. Winslow had seen a case in a child 4 or 5 years old, where the membrane first appeared in the larynx. When summoned it was plain that the child had membranous laryngitis, but there was nothing visible in the pharynx. In a few hours, however, it appeared in the throat, subsequently also on the conjunctiva and on an abraded surface on the ear. The child recovered and is still living, but with well-marked opacity of the cornea as a reminder of his sickness.

Dr. Richard H. Thomas formerly regarded croup and diphtheria as non-identical. Now he was inclined to the contrary view. Cohen, though he holds that they are not identical, allows that there is no difference between the membranes. So Ziemssen. Paget says we cannot distinguish between the two by microscopic examination; he has also observed uræmia following croup. Mackenzie explains the swelling of the neck by the lymphatic arrangement; when the pharynx is involved, the lymphatics which run from thence to the glands below the angle of the jaw cause inflammation in them, whereas the lymphatics of the larynx do not run to these glands. Thus in cancer of the pharynx he points out that these glands are swollen, but, on the other hand, are rarely affected when the cancer is confined to the larynx. Mackenzie had also observed paralysis following croup. The differences in the clinical history are explicable by the difference in the seat of the membrane.

Dr. Tiffany referred to cases which had occurred at the University Hospital. A patient died of diphtheria two days after admission. The nurse, resident student and assistant physician all had the disease; the membrane appeared upon the incision of a child upon whom he had performed lithotomy, although there was no implication of the air-passages. A membrane also appeared on the cervix uteri in a patient upon whom *Dr. Howard* had operated for lacerated cervix, but was limited to this situation.

In another case a female child, aged 7, showed a white patch of membrane in the region of the hymen; a borax wash was ordered, but it persisted, and attempts to remove it caused hemorrhage. The voice grew hoarse, then became extinct, and the patient gasped for breath; a patch was now discovered on the tonsil. An examination of the vulva at this time revealed the patch still there. The pharynx became covered with the membrane, and the nares were also involved. She recovered but remained weak for several months and did not regain her health completely for a year.

Dr. Tiffany saw no cause, reasoning from the foregoing, why diphtheritic membrane should not occur on the larynx and in no other part of the body. In such a case how would the differential diagnosis be made between croup and diphtheria, supposing that there is a difference?

In another instance he was called to see a case in which the larynx was alone involved (without swelling); the patient died before he reached it. Three other children in the same house died subsequently from the same disease; all of these had a membrane in the pharynx.

He did not wish to say that croup and diphtheria are identical, but it was strange that he should have met so many cases in which he was, unable to distinguish between them. It is not possible to distinguish between the false membrane of the two affections.

In two cases pronounced true croup, two of the attendants in one, and one attendant in the other, had diphtheria subsequently.

Dr. Coskery reported a case where he found a child gasping for breath with seven respirations a minute. He put his knife into the trachea at once, and then

applied his mouth and sucked out the blood; long narrow shreds of membrane also came out. The patient did nicely for a time but died thirty hours after the operation. *Dr. C.* had shortly after fever, sore-throat, a membranous patch on each tonsil and was confined to bed; the symptoms disappeared after a critical evacuation. His child, who was playing about the room, was also taken sick after forty-eight hours and had patches on the tonsil. The diagnosis made in this case by the attendant physician was membranous croup.

Dr. Chambers declared that he could not diagnose between the two, and referred to a case which had been diagnosed as croup, yet diphtheria was communicated from it to a lady.

Dr. Morris had practiced medicine ten years before there was any diphtheria—recognized as such—in Baltimore; there was only croup—non-contagious and not requiring isolation. The present diphtheria is not the same as the old disease. He experiences the difficulty of always making a diagnosis.

Dr. J. Carey Thomas said it had not always been non-contagious in those early days. In a family in his father's practice all the members died, one after the other, of the disease.

Dr. Wm. Lee agreed with the author of the paper in the opinion that diphtheria and true croup were different diseases, but thought that not enough stress had been laid by him upon the fact that the treatment of the two was, in the main, unlike. He referred to a conversation he had had with an eminent English physician on the subject; when asked how he would differentiate laryngeal diphtheria from true croup in cases where the fauces are free from deposit, this gentleman replied: "Well, if I give an emetic and bring away the membrane and it is not reformed, I call the case croup, but if it reforms it is diphtheria."

Dr. Lee went on to say that there could be no doubt as to the contagiousness of diphtheria, citing as a proof an instance in which he was attending a case of diphtheria, where a well-marked membrane formed at the same time on the site of a vesicle in another member of the same family whom he had vaccinated ten days before.

Dr. Latimer.—When diphtheria affects the larynx first the diagnosis is difficult; dyspnoea characterizes both. Are we to conclude that they are identical because we cannot distinguish them in some instances? Typhoid and typhus fever are often confounded, yet it is not now denied that they are distinct diseases. Rindfleisch, Weigert, Rokitsansky, Day and others, say the membranes are different. He drew up the following summary of differences:

Diphtheria, there are symptoms antedating the local; croup, none; diphtheria, local symptoms appear first in pharynx and spread thence to the larynx; croup, principally in larynx; diphtheria, there is enlargement of the lymphatic glands; croup, no lymphatic enlargement; diphtheria, there is constitutional trouble; croup, none; diphtheria, there is nephritis and albuminuria in a large proportion of cases; croup, none; diphtheria, there are sequels; croup, no sequels.

These are broad distinctions. There are cases, however, which shade into each other.

CARCINOMA OF TESTICLE.—*Dr. Christopher Johnston* exhibited a specimen of carcinomatous testicle with the following history: A gentleman, æt. 35, of irreproachable life and character, observed six years ago a small nodule in his right testicle. There was no history of cancer in his family. It grew slowly. When it had attained the size of a hickory nut its growth ceased. Four months ago it began to grow again. One week ago the patient showed himself, with an elastic, completely oval tumor, exhibiting false fluctuation. The swelling did not enter the cord. Examined with a candle there was no translucency. There was no glandular swelling. An incision was made downwards and outwards, across the swollen scrotum. The vessels were very much enlarged. Three separate ligatures were applied to the cord before its severance, the wound was washed out with hot carbolized water, and the edges brought together with silver sutures.

Upon dividing the tumor it presented a gray and pulpy appearance. Cancer cellular structure was found under the microscope. *Dr. J.* emphasized the

importance of not puncturing or incising the testicle diagnostically in these cases of apparent fluctuation, owing to the risk of fungous protrusion; but recommended that at the moment of an intended operation a puncture might be made if the diagnosis was still obscure in the estimation of the surgeon.

As the tunica vaginalis was involved that expansion was removed with the testicle; and the friends of the patient were apprised of the great probability of a reappearance of the disease in some part of the body.

CONSTITUTIONAL TREATMENT IN DISEASES OF THE EAR.—*Dr. Theobald* opened this subject with an elaborate paper. In ear diseases, he said, local means are now almost exclusively employed, constitutional rarely. Of Dalby's recent work all that is embraced upon the subject would occupy about one page only of its 224 pages. The same feature characterizes Buck's book, although to a less degree. Other authors were referred to in confirmation of the statement. Ten years ago *Dr. Theobald* began the practice of his specialty. With each succeeding year he has acquired more and more confidence in internal remedies in the treatment of ear diseases until now he has almost as much confidence in them here as in affections of the eye. He first considered *mercury*. A serious mistake was made in limiting its use to *syphilitic* cases. He believed it has a specific efficacy in arresting inflammation. The structures of the ear, moreover, are peculiarly favorable for its action. *Wilde* favors the bichloride in chronic and subacute middle-ear catarrh. *Roosa* condemns it. *Dr. T.*'s experience led him to endorse heartily *Wilde's* opinion upon mercury, as also what he says in regard to the safety which attends the long continued use of the bichloride. He preferred, however, the *biniodide*, dissolved in water by combining two grains of iodide of potash with each grain. One-forty-eighth to one-sixth grain may be given thrice daily. In middle ear deafness one-thirty-second or one-twenty-fourth grain is enough to begin with. The *bichloride* may be employed if the patient is susceptible to the action of iodine, or on the other hand the proportion of iodide

of potassium may be increased. In diseases of the middle ear, where the fibrous tissues are chiefly involved, and there is a tendency to sclerosis, it is particularly efficacious. Dr. T. had not confounded syphilitic and non-syphilitic diseases of the middle ear. All he had said was applicable to the latter, only it had twice the force in connection with specific disease. Dr. Alan P. Smith had obtained better results in chronic nasal catarrh, even when not dependant upon syphilis from the long continued use of the biniodide of mercury, than from any other plan of treatment. Syphilis frequently invaded the labyrinth, and much could be accomplished under such circumstances by the administration of the biniodide of mercury. In acute inflammation of the middle ear the appearance of marked constitutional disturbance and symptoms of cerebral irritation called for the liberal administration of calomel, guarded, if need be, by opium and supplemented in some cases by inunctions with the oleate of mercury. In inflammation of the tympanum leading to brain disease authors scarcely allude to any internal remedies except opium; so in mastoid disease. In both Dr. T. would employ mercury. Pus appears late in disease of the mastoid cells, and there are comparatively few cases where it is found upon puncture. A lady had acute suppurative inflammation of the drum of the left ear, which resulted in rupture and otorrhœa. Insufflation of alum powder was resorted to, and the discharge was checked; this was succeeded by pain, aphasia, delirium. Under the use of a seton and small doses of the biniodide, improvement, followed by entire recovery, took place. There was no syphilis here. The next case reported was that of a man still under treatment. He applied for treatment on account of pain and defective hearing. Some impacted cerumen was removed but the deafness was not relieved nor the pain diminished. The Politzer bag and anodyne drops were also employed. The left mastoid region became rep, swollen and tender, evidently due to extension of inflammation from the tympanum to the mastoid cells. The biniodide, gr. one-sixteenth doses, three times a day, was ordered. Two days

afterwards calomel and rhubarb powders were ordered in addition. After two of the powders had been taken a marked change for the better became manifest, and with the exception of some setting back from excess (after which the biniodide was increased to gr. one-twelfth) improvement continued steadily, and now the patient is nearly well. The *iodide of potassium* had not yielded results equal to those obtained from mercury. In rheumatic disease of the middle ear, however, it had been of undoubted use. *Muriate of ammonia* was sometimes useful in subacute and chronic middle ear catarrh, dose, grains x to xv four times a day to adults. It was especially to be recommended for true middle-ear catarrh. For the use of *pyrophosphate of soda* he was indebted to Dr. Alan P. Smith. It had been of benefit in acute suppurative inflammation of the middle ear, in furuncles of the auditory canal; also in hypopion (a crucial test) dose gr. x to xx every two to four hours. Each scruple requires $\frac{3}{4}$ ss water for solution. The *sulphide of calcium*, *arsenic* (in eczema) and *cathartics* were also referred to. Of the last named those containing calomel were regarded as best; in many cases of inflammation a powder containing two grains each of calomel and scammony and five to ten of rhubarb given at intervals of from twenty-four to forty-eight or more hours, according to the urgency of the symptoms, will prove of very great service. *Tonics* are indispensable, the combination of phosphate of iron, quinia and strychnia being especially worthy of commendation. All authors recommend *anodynes*. There is a prevalent tendency upon the part of aural specialists to over-estimate the value of local remedies, and to under-estimate the value of constitutional remedies, in the treatment of diseases of the ear; Dr. Theobald thought that in calling attention to this he was not doing a work of supererogation.

EDITORIAL.

REPORT ON DIPHTHERIA BY DRs. WOOD AND FORMAD.—Supplement No. 17, National Board of Health Bulletin of January 21st, contains the full text of a "Report on Diphtheria" by Drs. H.

C. Wood and H. F. Formad prepared under the auspices of the Board. This report gives the original researches of these investigators in a field of labor hitherto carefully studied by trained observers, but one which has only partially yielded accurate scientific data. In the November 1st number of this JOURNAL attention was briefly called to some of the views on "The Nature of the Diphtheritic Contagium," presented in an abstract form to the Philadelphia Academy of Natural Sciences, by these gentlemen.

We gladly welcome the full text of a report which presents original observations of a most valuable character. We now wish to call attention to the more prominent facts brought out in this report. It is a valuable contribution to the subject of which it treats, and its careful study will amply reward the reader. We cannot commend too highly the very careful and painstaking manner in which these researches have been made, and the frank and accurate style in which they have been presented. In dealing with this subject Drs. Wood and Formad have labored to eliminate all sources of error. Their observations, as far as they go, will convey the impression of having been reached by close study and scientific method.

The report opens with a review of the views of other observers in favor of and against the fungoid origin of diphtheria. Having given an epitome of the results obtained by all the investigators as to the relations of bacteria to diphtheria, with whose work they are familiar, they then confine the report to their own studies. These were made from a clinical and experimental point of view. There were two questions to determine. First, whether bacteria, which are always present in the false membrane of diphtheria, are identical in form and size with those which are present not only in the membrane of a non-diphtheritic tracheitis, but also in the inflammation of an inflamed tonsil; second, whether bacteria are always present in diphtheria or only in some cases. To answer the first question a large number of cases were examined. These cases were divided into two sets: First, those of endemic or sporadic diphtheria; second, those of

true malignant epidemic diphtheria. Observations were made in Philadelphia and in Ludington, Mich. Set No. 1, consisting of eight cases, were all observed in Philadelphia; set No. 2, consisting of fourteen cases, were observed in Ludington, where malignant epidemic diphtheria prevailed. The first set, observed in Philadelphia, were cases of endemic mild diphtheria. Out of the seven cases, in which the blood was examined *during life* for micrococci, in six no fungi were found, whilst in one case micrococci were somewhat abundant in the vital fluid. Of the Ludington cases, fourteen in number, in seven micrococci were found and in seven none were present. The cases in which there were no micrococci were all of them very light, or in the stage of convalescence, and the amount of fungi present in the malignant cases seemed to be proportionate to the severity of the symptoms, and to steadily progress with the disease in the fatal cases. "The study of these two sets of cases is sufficient," they say, "to enable us to formulate, as established, the proposition that in *endemic mild diphtheria micrococci are always present in the part locally diseased, but are usually not present during life in the blood or in the glandular organs, even in cases which prove fatal; that in malignant epidemic diphtheria micrococci are always present in the part locally diseased, and are also usually and perhaps always to be found in the blood and tissues of severe cases, but are frequently if not usually, absent from the blood of mild cases.*"

The next question which received attention, was whether micrococci are found in the blood in other diseases besides diphtheria; and, if so, whether they are distinguishable from those found in diphtheritic patients. On this point they have not facts sufficient to warrant positive conclusions. They, however, consider them rarely present in human blood as a large number of cases examined failed to show their presence. In only three cases were they observed in persons suffering from other diseases.

In referring to the Pathology of Diphtheria they conclude that the result of experiments and careful studies of the anatomy of the lesion do not justify a

distinction as to the non-identity of diphtheria and pseudo-membranous croup. They say "It will be shown that the morbid process which gives rise to the respective lesions in the pharynx and in the air passages is the same, and the anatomy of the products identical." They claim that the apparent difference in the lesions and in the morphology of the exudates is altogether conditioned by and dependent upon the anatomical peculiarities of the pharynx and respiratory passages.

The reasons for this opinion are fully and carefully stated. Whilst they are not fully conclusive they seem to offer the most rational proof of the identity of the two diseases we have seen advanced.

The next subject of interest in connection with this report relates to the morphology of micrococci. The difficulty encountered in distinguishing bacteria from other minute organic and inorganic particles is first considered. Certain mycelial threads and vibrios, coagulated fibrin, and protoplasmic and fat molecules often closely resemble micrococci. The different characteristics to be observed and the means of recognizing these objects as distinguished from micrococci are well defined. To the experienced eye the micrococci may be distinguished at a glance. In individual zooglea mass they are always uniformly of one size and are always at the same distance from one another in contradistinction to fat and albuminous molecules. Isolated micrococci may vary in size, as may also the micrococci in the different zooglea groups. They may arrange themselves in pairs or in chains. Micrococci are not soluble in strong acids and alkalies, nor in alcohol and ether as are fat and most other molecules. They take staining well. The most important distinguishing point is obtained by culture. They will always multiply though sometimes much more rapidly than others. They elongate, divide, form chains or zooglea masses if brought into a suitable culture medium.

The methods of culture are next explained. Two methods were employed: that of Dr. E. Klein of London, and the one perfected by Dr. Sternberg, U. S. A. The most extensive and satisfactory cultivations were made with dried diphther-

itic matter. The biology of the diphtheritic micrococci as observed in culture is fully and lucidly explained. The reader will be struck with the care taken in conducting these cultivations. The culture experiments are full of interest. We cannot commend too highly the accurate and systematic manner in which they have been carried out.

Passing on, the next subject is a chapter on "The Nature of Diphtheria." In this we find the series of experiments in tabular form. The conclusions reached have been previously stated. At the risk of repeating what is now generally known we give the following summary of the facts which have been established. "The micrococci of diphtheria do not differ, so far as observed, from the micrococci of furred tongue, etc., except in their tendency to grow in culture fluids.

The micrococci of furred tongue or ordinary sore throat have a less tendency to grow under culture than have the micrococci of endemic non-malignant diphtheria.

The micrococci of endemic or non-malignant diphtheria have a much less tendency to grow under culture than have the micrococci of malignant diphtheria.

The rapidity of growth of the micrococci is in direct proportion to the malignancy of the case yielding them, and its contagiousness.

On exposure to the air diphtheritic membrane of the most violent type loses its contagious power, and the micrococci *pari passu* lose their power of growing in culture fluids.

Under successive generations of artificial culture the diphtheritic micrococci lose their growth, activity and also their power of infecting the rabbit.

It has not been experimentally directly proven, but it is a necessary inference from the two facts just stated, that under certain favoring circumstances the sluggish micrococcus puts on growth-activity, and, in all probability, *poisonous properties*.

Every grade of case can be found in man from an ordinary sore throat, through simple pseudo-membranous angina and tracheitis up to malignant diphtheria.

Any inflammation of the trachea of

sufficient intensity may cause the formation of a pseudo-membrane."

The theory of diphtheria deduced from these facts is that the micrococcus is not a specific organism different from that common to healthy or inflamed throats, but is an active state of that organism; that certain circumstances may throw this micrococcus into this condition of active growth and engender an epidemic diphtheria. According to this theory a micrococcus brought into activity by an epidemic diphtheria may light upon a throat, and if the throat have little resisting power, as in the child, inflame it or increase a catarrh already existing into a violent inflammation, and also rapidly enter the blood and cause systemic poisoning. An ordinary "cold" may thus become a focus of infection and degenerate into a malignant diphtheria.

MISCELLANY.

MUSCULAR SPASM OF DISEASED JOINTS INDICATIVE OF OSTEITIS.—The muscular spasms by which diseased joints are made more or less rigid is pathognomonic of an osteitis. It may be tested in the hip, for example, by strongly flexing the leg and thigh, then holding the pelvis firmly with one hand and with the other rotating the thigh outward or gently flexing or extending it. There will be a spring-like resistance to any such attempts at movement which is very characteristic. If a further test is required the patient is to be laid flat on the stomach. The pelvis is held with one hand and the knee grasped with the other. By lifting up the knee the psoas is put on the stretch. If there is osteitis the consequent muscular spasm will show itself very plainly. All these movements must be produced with the greatest gentleness. In a neuromimosis there may be some such spasm but it is not persistent.—*Dr. N. M. Shafer's Lectures, Quoted by Correspondent of Chicago Med. Journ. and Exr. of Jan.*

SOCIETY BULLETIN.—*Acad. of Med.* will meet Tuesday, Feb. 21st, 8.30 P.M. *Obstet. and Gynecol. Section, Med. and Chi. Fac. of Md.*, will meet Friday, Feb. 24th, 8.15 P. M. Dr. P. C. Williams on "Ergot;" Dr. B. Bernard Browne on "Treatment of Amenorrhœa by Electricity." *Ophthal. and Otolog. Section, M. and C. F. of Md.*, meets 1st Wednesday in each month. *Med. Ass'n* will meet Monday, Feb. 27th, 8.30 P. M. *Med. and Surg. Soc.* meets every Wednesday, 8.30 P. M. *Clin. Soc.* will meet Friday, Feb. 17th, 8 P. M. Dr. Morris, "Some Observations on Bovine Vaccination;" Dr. R. Thomas "Some Observations on the Treatment of Pulmonary Diseases at Mont Doré, France; March 3rd, Dr. J. D. Arnold on "Laryngeal Phthisis."

MEDICAL ITEMS.

THE case of recto-vulvar fistula caused by abscess of Bartholin's gland, contained in the report of the Clinical Society of Maryland (MARYLAND MEDICAL JOURNAL, Jan. 1st, 1882), should have been credited to Dr. B. Bernard Browne; the author's name was, through an oversight, omitted. =The alumni meeting and banquet of the College of Physicians and Surgeons takes place on the evening of March 1st. The graduating class numbers 173. =Ivanchich, who claims to be the most successful lithotomist in Europe, publishes 300 cases (33, however, being lithotripsy); of the first 100, 14 died, of the second 100, 5, and of the third 100, 3. =The Alumni Association, Univ. of Maryland, will meet on commencement day, March 1st, at 8 P. M., at the Carrollton Hotel. Prof. Roberts Bartholow, of Phila. (class of 1852), orator. The annual banquet will begin at 10 o'clock. Those wishing to join must make application through the executive committee, Dr. D. I. McKew, ch'n. Annual dues, \$1; supper ticket, \$1.25.

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VOL. VIII, No. 21.

ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

REMARKS ON SMALL-POX AND VACCINATION.

BY J. S. CONRAD, M. D.,

Formerly Physician in Charge of Pest Hospital;
Resident Physician Matley Hill Sanitarium,
near Baltimore, for the Care and Treat-
ment of Mental and Nervous Diseases.

(Read before Balto. Academy of Medicine Feb. 7th,
1882).

The present epidemic of small-pox prevailing in this country renews a former interest in the subject, and recalls my experience with the epidemic of 1871 and '73.

Although I am now engaged in another line of special practice, the professional interest which was enlisted at that time has lost none of its attractions by time or other duties.

My remarks on small-pox and vaccination are suggested by a paper read by Dr. McSherry before this Academy, and published in the MARYLAND MEDICAL JOURNAL for Jan. 1st, 1882; also by the letter of Dr. McSherry, contained in the same JOURNAL for Feb. 1st, 1882.

I propose to call your attention to a few features only of variola, some of which are connected with vaccination. In doing so I shall call upon my recorded experience already published in the Transactions of the Medical and Chirurgical Faculty for 1874, as well as the published experience of others who have had occasion to observe variola at the bedside in such numbers and variety as to give value to their observations.

I shall notice the subjects proposed in the following order: 1st. The incubative period of variola. 2nd. The puerperal state as a complication, and the foetus. 3rd. The vaccine disease. 4th. The character of the eschar as affecting variola in its development and course. 5th. The incubative period of vaccine disease as affecting its protective value.

Viewing the subject in the order mentioned, let us consider the incubative period of variola. This period I have ascertained to be twelve days from the date of exposure to the initial fever, and fourteen days to the beginning of the eruption.

I recognize the difficulty of ex-

cluding sources of error that may justify a defined period of incubation; this period, however, often becomes an important factor in cases of exposure that makes it of paramount importance, so that it cannot be overlooked, and is worthy of the most careful consideration by the profession. On this account I shall mention the data, which have enabled me to state that period in days from my own experience and discuss the value of the establishment of an incubative period later in this paper. A young lady, visiting the city from one of the Blue Ridge counties of Virginia, was attacked with small-pox and sent to the Pest Hospital. As soon as her mother was informed of the fact she left her home (in the neighborhood of which no case of small-pox was ever known) on the next train and came by rail to the hospital without stopping. The mother had already a good cicatrix on her arm, done in infancy. Before entering the room of her daughter she was again vaccinated in six different points (three on each arm) and with two different kinds of lymph, neither of which were successful, however. In exactly twelve days after her arrival she was taken sick, and in two days after the eruption of varioloid appeared. Two other cases of like character, in which dates could be ascertained, came under observation (these cases will be mentioned later in the discussion of vaccination and its protective influence).

Dr. Marson (Reynolds' System of Medicine, vol. I, 1882, p. 434) says: "Small-pox appears on the skin fourteen days after the infection of the disease has been received into the constitution, the *precise* time being after thirteen twenty-four hours have elapsed from the moment of taking the disease." Dr. Marson's experience includes 15,000 cases observed, so that his experience is worthy of notice. This author fixes the date of incubation in positive figures, and in

such absolute manner that one might almost imagine that he had all to do with it; and, strange to say, he makes no exception, neither does he state his period of incubation with any qualification nor as an average period, so that we are left to infer that he means no variation. I fail to find mention of the incubative period of variola in the standard authors—Flint, Niemeyer, Trousseau and Ceeschman (Ziemssen's System of Medicine, vol. II). Neither does Dr. Welsh mention the subject.

Marson mentions the effect of previous vaccination as affecting the incubative period of variola, and says it is reduced from twelve days to ten or eleven days.

I have dwelt upon the incubative stage of the disease for the reason of its importance, and for the purpose of using the fact, subsequently, when I come to discuss the subject of vaccination.

The puerperal state as a complication. In severe forms of variola, abortion generally occurs in pregnant women, and post-partum hemorrhage follows, seriously complicating the prognosis. In five cases of miscarriage, which occurred in my experience, the foetus in each one presented no evidence of the eruptive disease from which the mother suffered. Subsequent inquiry into the subject, however, informed me that other observers had noticed the skin of the foetus affected. It must, however, be very rare. Dr. Welsh (Philadelphia Health Report, for 1872) mentions forty cases of abortion occurring in variolous disease, and in only one case does he speak of "some slight scars" on the foetus.

Marson (p. 440 Reynolds' System of Medicine) says: "Pregnancy may be mentioned as one of the anomalies, and another the existence of small-pox on the foetus at birth, which must have gone through the state of incubation, the primary fever, and early

days of the eruption." "We have several times seen," says the author, "children who were born with eruption of small-pox *out on the body, but modified* as it is on the mucous surfaces." Marson's experience includes 15,000 cases. The number of miscarriages in this number he does not state, so that we cannot arrive at any proportion in which it occurs, yet, as he says, he has several times witnessed the eruption on the skin of the fœtus, it must be quite rare.

Dr. Richard McSherry, in his remarks on smallpox, (MD. MED. JOUR. January 1st, 1882,) says: "I have never met a practitioner who had seen such a case though all had read of them." *Dr. Steuart mentions a case occurring in the practice of his father. Dr. R. H. Day, Baton Rouge, La., (MD. MED. JOURNAL, February 1st) mentions a case in his practice.

I am quite convinced without positive evidence to sustain the statement, that frequently pregnant women suffering from variola, or varioloid or indeed vaccine disease, may so affect the blood of the fœtus that the child may not be susceptible to variola, or the vaccine disease, at least for a considerable time after birth; and further, that in some rare cases, there is an immunity acquired by the fœtus, which renders the child insusceptible to acquire unmodified variola in after life and equivalent to the protective influences of vaccination. Under the circumstances it is scarcely possible to sustain such a statement, as no one would be justified in trying the experiment. Yet circumstances have occurred giving a decided color, to say the least, to the belief, amounting almost to a proof.

In this opinion I have, at least the color of a case, going to sustain to some extent my belief; also when I come to consider vaccination I shall

call attention to other cases, which strengthen the supposition and deepen the color of belief. During my residence at the Pest Hospital, a child was born at full term; the mother was exposed to the daily contagion of small-pox. She had had varioloid in childhood, but during her pregnancy she was vaccinated, successfully. After the birth of the child at the Hospital, it was vaccinated successively every week during a period of from four to six weeks—and with various kinds of lymph, all of which had succeeded with other cases. In the case of the child mentioned, I was not able to secure the vaccine disease, for a longer period, although, I had used fresh bovine lymph. Still as the child was daily exposed to the contagion of small-pox I felt great anxiety for its safety, and never relaxed my efforts to secure a successful vaccination. At last (I cannot remember the age of the child, exactly) it did succeed, and I watched the course of the vesicle to maturity, and must say that I did not consider the areola formation as perfect as might have been expected, nor are the foveations left in the cicatrix as numerous or well defined as they should have been. At the time the resistance of the child's constitution to the influence of the vaccine disease suggested the inquiry in my mind, which Dr. McSherry has made in his letter to the MD. MED. JOUR. February 1st, 1882, and I cite the case accordingly. As the fœtus is fed by the mother's blood why should it not also be affected by the vaccine disease, the virus of which has been absorbed into the mutual circulation, and which must be more or less affected in the same manner? The blood current is common to both, and if one be affected why not also the other? As a physiological question it answers itself; and as a pathological one is the taint not likewise in common to mother and child? If it were a syphilitic

*Dr. McSherry's remark applied only to *pustulation* in the fœtus in utero. He was discussing the effect of the exclusion of air in preventing pustulation.—Eds.

taint would we not all agree as to the influence of that virus in affecting the the child in utero? Likewise the suggestion of Dr. McSherry (MD. MED. JOURN., Jan. 1st, 1882) is pertinent to one just considered, and of like character, viz., "a foetus in utero may take small-pox from the mother and come into the world protected from the disease without having any marks upon it to explain the exemption, or it may pass through an attack without the mother suffering herself with what she transmits to her child."

* * * * It is not at all difficult to accept the suggestion as one capable of a reasonable belief, to say the least, in the absence of positive evidence. There are some facts which came under my observation during my charge of the small-pox hospital which forcibly attracted my attention at the time, in the same channel of inquiry, so much so that I made it a subject of careful investigation as far as I was able to pursue the evidence.

It was frequently the case that patients presented themselves having no appreciable protection whatever, and yet had only the mildest forms of varioloid. This fact occurred so often that I began to question the patients as to their past history. Many could not remember having ever been vaccinated, and if they had been could show no evidence of the fact; neither could they say that their parents had ever had variola. Whilst these facts frequently occurred to my observation there were other cases which indirectly corroborated the line of inquiry, viz., sixty-four per cent. died who had no evidence of vaccination, whilst only forty-seven per cent. died "unknown if ever vaccinated or not, and having no cicatrix to show." Why should this difference have been the case? Could the inquiry be silenced by saying one was susceptible to the variola and another was not? Yet fifty-three per cent. of the "unknown" *
* * " recovered and only twenty-

six of the other class did so. The proportionate difference is too great. The inference is sustained by the difference, or, at least, gives color to the belief in the absence of positive proof. At the time of these inquiries (1872 and 1873) the deduction forced itself upon my mind as a solution of the question that those persons having no evidences of vaccination, and yet modified forms of disease, were the children of mothers pregnant at the time of vaccination or suffered from variola or varioloid prior to their birth and during pregnancy.

On the other hand there can be no doubt of the fact that some persons are far more susceptible of the disease than others. This is clearly proven by those cases who have variola more than once. But is it true that there are others who, by nature, are wholly exempt, or have an exemption equivalent to the modifying influence of vaccination? We have proof of the one but not the other.

Those who have observed the disease in large numbers, having opportunity of comparison one with another, cannot fail to note the vast difference of susceptibility in different individuals. The blood of some persons appeared to be peculiarly rich in that peculiar something, upon which the germs of variola feed and propagate, just as low organisms of other types find their pabulum and avoid sterile fields. Unfortunately we deal with human life and consequently cannot prove our beliefs, neither confirm or disprove our theories in all cases. But, fortunately, clinical evidence now and then leads us into channels that give us more than glimpses of what we could prove, doubtless, if we dealt with less valuable material than human life.

The second principal proposition is the *vaccine disease*—subdivided into the character of the eschar, as affecting the development and progress of variola; second, the incubative period

as affecting its protective value.

The character of the eschar determines the value of protection. I am very sorry to say that within my knowledge but few physicians have studied carefully the character of the eschar, which they find upon the arm of the subject, and still more regret that of the ninety and nine students which our colleges annually throw upon the public, scarcely one knows the characters of a good and protective vaccination. I must also confess I never recognized the true from the false mark until experience taught me the difference. In the mean time I cannot tell how many persons my ignorance placed in danger or under the sod, except the conscious recollection that very few gave me the opportunity of deciding the question, and it is well they did not.

The character of the eschar is an important point for the decision of the practitioner, who holds in his hands the happiness, welfare and lives of a family. Then, too, it may turn the scale of a fortune to put a monied value upon it, as against a soul, for in these days the first is as much a consideration as, perhaps, the other.

The features of a good eschar are more easily acquired by observation than conveyed in words, and it may be presumptuous for me to attempt the delineation of the true from the false. But as a part of my paper programme I must define it the best that I can, and submit my picture to your judgment.

I would say an eschar of protective value is to be judged of by the *number of foveations which the spot contains*, for these represent in miniature vesicles of itself, and proportionately represent the protective value. This is my idea of a good eschar. A false one is minus these features, and plus a great big keloid-looking mark resembling a burn or scald, with radiating lines of connective tissue cicatrix. The *areola formation* is the

only evidence of protection, and until this stage of the vaccine disease arrives and *matures*, there is no reliance upon its protective influence. Second, the incubative period of vaccination as affecting protective value. Under this heading I would say that experience has proven to my mind, beyond doubt, that until the vaccine areola *forms and matures* there is no protection from variola. The period of areola formation differs in different subjects, but, as an average, is nine (9) days. In some the areola matures in nine days, in others not before the tenth or eleventh day. Dr. Welsh (Philadelphia Health Report, 1881) says "that we learn from these notes that where vaccination had been performed less than seven days before the appearance of the eruption no modifying influence has been exerted, while on the other hand when it had been performed as long as seven days prior a very decided modifying influence has been exerted." The experience of Dr. Welsh is not borne out by our observations nor those of Marson, and I cannot help thinking that this minimum date of seven days was doubtless based upon cases that had already been under the modifying influence of vaccination either in the person of the subject or else some prior variolous influence, possibly in utero. The vaccine areola maturity is subject to the same modification by prior vaccination, that is found to obtain in the variola pustule by the influence of the vaccine disease, so that it is easy to understand that one or two days difference is the result in secondary cases.

Dr. Lewis, of the Baltimore Infirmary, sent two cases to the pest hospital, both vaccinated at the same time and with the same lymph; both were exposed to contagion at the same time in the Infirmary, neither had been vaccinated. In exactly twelve days afterwards both had the initial fever and in two days after the

eruption began to appear (when they were sent to the pest hospital). In one case the areola was matured and hardening. In the other it had not reached maturity at all, but was broken down. In the first case there was only a mild form of varioloid, with but few pustules quickly drying up. The other person had a severe case of semi-confluent variola and barely escaped death. Upon the truth of these two cases and others within my experience of like character, I am satisfied that the shortest duration of incubation for the vaccine vesicle is nine days in unvaccinated cases. I am also convinced from actual experiment that the hypodermic injection of lymph after the initial fever has begun has no modifying influence whatever, upon the subsequent variola, and am further assured that this method of protection presents no additional security over ordinary vaccination done at the same time, and that neither will avail unless done within the natural period of the areola formation and maturation, of the vaccine vesicle.

Marson (Reynolds' System of Medicine, page 477) says: The areola of vaccination is not fully formed until the 9th or 10th day of the progress of the vaccine vesicle, on those who have never been vaccinated before; so that unless there has been time for the areola to be formed after vaccination before the illness produced by small-pox begins, the vaccination will not be of the least benefit." "This we have seen over and over again, and know it to be the exact state of the question." This opinion of Dr. Marson has been confirmed by my own repeated observations; and his positive way of stating it emphasizes the fact.

Having, then, the incubative period of variola (twelve days) defined gives us one term of an equation; and the defined incubative period (as a minimum, nine days) of the vaccine disease,

as the second term, we can positively state the third term and its result in any given case. To illustrate this equation practically, let it be granted that the incubative period of variola is twelve days (as shown) from date of infection, and let it be given that the incubative period of vaccinia is nine days (as a minimum); we have then three days in which to depend upon the safety of the subject. That is if Mr. Jones be infected by variola on the first day of the month and is vaccinated on the second or third thereafter (with success), we may say with certainty that his protection will be complete.

Whilst the above statement of the relationship existing between variola, vaccinia and protection, is true in the vast majority of cases, there is yet evidence adduced sufficient to question the two last factors, and the result as a consequence. This uncertainty arises from the fact that the subjects themselves differ in susceptibility to the influence of vaccinia, and thus some persons acquire protection and develop the areola formation earlier than others. So, also, as in the cases of Dr. Lewis mentioned, one of which did not mature the areola on the ninth day whilst the other did, which vitiates the equation above given. In *all* cases, therefore, nine days is not a sufficient time for the maturity of the areola, and in such cases is not protective. These cases must be rare, and the retardation of the areola maturity may be rather ascribed to some inhibitory influence affecting the constitution at the time, just as constitutional degeneracies or other coincidental contaminations or taints react upon the progress and development of the vesicle.

DR. ROBERT BRIDGES of Phila., Emeritus Professor of Chemistry in the Penn. Col. of Pharmacy, died Feb. 20th.

CEREBRAL RHEUMATISM.

BY JOHN DICKSON, M. D., BALTIMORE.
Visiting Physician to Union Protestant Infirmary, etc.

(A paper read before Balto. Med. Association, Feb. 13th, 1882.)

Compared with the frequency of rheumatism in various other forms, that with cerebral symptoms is very rare. I have only seen it, well marked, in two attacks, and they occurred in the same person, at an interval of seven years. She had had a similar spell before I knew her, several years before the second one.

In each, the joint symptoms appeared a week or two before the mental excitement and delirium came on.

The first time I treated her the mental exaltation and loquacity with insomnia, kindly yielded to large doses of bromide of potassium added to the constitutional remedies preceeding. It was a struggle of about ten days, and then physical and mental calm set in together, with a condition of general prostration, from which she soon rallied under a tonic regimen and good diet. In the intervening years there was a rheumatic tendency, subacute, and sometimes acute articular, but never attended by brain symptoms, and always yielding readily to the salicylate of soda or bicarb. potass. combined with iron or cinchona, and sometimes both; for there was generally an anæmic condition to contend with as well.

Her last attack, occurring a year ago, about the period of the menopause, was much more formidable than the other, and assumed the form of acute mania at times. When I first saw her she had been suffering for some days with severe rheumatic pain in the right knee and shoulder, which she could not move or bear to be touched. She had been treating herself with my former prescriptions; and though she sent for me to see one of her children, she boasted that she was going to cure herself. I

thought her boast and hilarious manner very unnatural, and so it proved; for she was on the border of a high state of delirium, from which it was very difficult to restore her. She fancied she had special knowledge of her own case, and obstinately refused advice, medicine or food, except such as she might occasionally crave for the moment. In spite of all the entreaties and devices that were used, she was in great danger of sinking from starvation and nervous exhaustion. For the most part, she was in a state of religious mania, imagining herself a queen in heaven, and vested with special visions of prophecy concerning the church and the destiny of her friends. She would insist on preaching to those who came into her room; and would not rest until she had explained, according to her own satisfaction, whatever passage of Scripture impressed her at the time.

This seemed to give her the greatest satisfaction, and she would, in the most earnest and eloquent manner, proclaim her thoughts as if she had found a priceless treasure, until she was perfectly worn out with the exertion; and a short lull would succeed, only to be followed, in a little while, by the same excitement again. During these periods she seemed oblivious to the pain in her shoulder and knee, though she was unable to move them, and never complained of headache or any other pain. She had to be lifted out of bed; and during the worst part of her illness, which extended over two weeks, she spent part of the day in her chair, desiring to receive the friends to whom she fancied she had special messages to deliver. Of course these requests could only be granted in rare instances; and we soon found that instead of the gratification that we hoped it might give her, every new face only increased the excitement; and the most absolute quiet had to be observed, even by the attendants.

When her delirium ran high she would have to be held from falling out of bed, and she would make strange grimaces and rapid attempts at spitting, not at anyone, but into the air. She apologised for her rudeness by explaining that she had such a burden of proverbs on her mind that she had to divulge them by a more rapid utterance than speech. She never lost her fine sense of propriety, except in violently rejecting medicines and food at times; and always recognized those around her, sometimes with unnatural antipathy to those that she most loved. She was suspicious of every attempt to nourish her by food or drink; and that became a most serious difficulty in her treatment. She had to be sustained entirely by milk, beef tea and such liquid nourishment as she could be prevailed upon to take, not having even natural thirst enough to crave them as often as we desired; for we had to conceal her medicines in them as well as to sustain her strength by them. Of this period she has the most distinct and agreeable recollection as of a time of intellectual enjoyment and sense of security, notwithstanding her consciousness of our anxiety about her.

The succeeding period of calm and repose is a perpetual blank in her memory.

During the progress of these alarming symptoms, which lasted with less or greater violence for nearly two weeks, it was both interesting and gratifying to notice the similarity and difference between them and those of acute meningitis.

The restlessness and delirium constitute the chief points of resemblance, and if these points alone were observed, it would easily have led to a mistaken diagnosis. But the history of the case, with the swollen and painful joints preceding the nervous disturbances, the perspiring skin, the absence of intense heat or pain about

the head, or hardness and acceleration of pulse, even at the times of greatest excitement, no injection of the eyes, dilatation of the pupils or intolerance of light, no loss of vision, no nausea or vomiting, no irregular respiration, no obstinate constipation, and no tendency to tremors, convulsive movements or coma; all these precluded inflammation of the brain or its meninges.

To what, then, must we ascribe the cerebral symptoms which marked this rheumatic attack?

To answer this question satisfactorily to this society, as well as for the gratification of confirming the theory of the treatment, which was successful in the case, I looked up all the recent authorities on the subject.

None of them seem to have advanced beyond the lactic acid theory of Prout and Fuller's day; and the frequent mention and quotations from the work of the latter set me out on a search for the book. I had only to name it to our accomplished librarian, Dr. Cordell, and he kindly handed it to me from one of these shelves. I expected only to glance at it when I saw the date, 1852, but it was such delightful reading that I took it home with me, as I would a gentleman of the old school, from whom I would gain some valuable experience; and I was not disappointed.

After discussing and disposing of the theories that these cerebral symptoms are always due to the embarrassed circulation occasioned by endocarditis or pleuro pneumonia, which are not necessarily present in such cases, though they are often are; he attributes the disturbance of the cerebral functions to the influence of blood poisoning upon the weakened and susceptible nervous system, in a way somewhat analogous to what we see in delirium tremens, erysipelas, traumatic fever, etc. In most of his cases the patients were, like my own, victims of previous attacks and had

been broken down by various causes leading to malnutrition and nervous exhaustion; and those who were depleted by blood-letting and depressing agents before he saw them in the hospital, and died as a consequence of such treatment, revealed no post-mortem traces of brain or heart inflammation to excuse such a theory of practice.

He consequently adopted the opposite course, and saved his patients, when it was possible, by soothing, stimulating and nourishing them back to strength and reason again.

His alkaline treatment was in advance of his day and has been the most popular and successful ever since. Nor has there been any material light thrown upon the nature or pathology since then. It is to be hoped, however, that science will reveal more clearly its nature, as it has improved its treatment, by enabling us to recognize its various and insidious forms of approach, and so be prepared to meet and arrest them.

I have no doubt but that I might have prevented the cerebral symptoms coming on in my case if I had seen her in time, as I had done several times before, when I observed her anæmic condition and a tendency to a rheumatic attack coming on, by building her up at once with iron and bark.

But in the attack which I have described, the nervous symptoms required the most powerful resources of the soothing art to combat, and a fearless application of them.

Bromide of potassium, which in the other attack had proved so effectual, had no effect whatever; nor had any other remedy by the mouth, which I was able to force upon her, or forge upon her in her drinks. She must have sunk from exhaustion, but from the effect of morphia hypodermatically employed. It was a great struggle at first to give it to her, but she soon

became conscious of its pleasant effect; and for a few hours after the sleep it produced she would be calm and rational enough to take her beef tea, milk and other liquid nourishment. I began with ten minims of Magendie's solution at first, but had to increase the quantity every day until I almost feared to give it so heroically. I then called my friend Dr. P. C. Williams in consultation, who confirmed my plan, and suggested the addition of digitalis to the morphia, in order to increase its efficacy and give tonicity to the heart's action, which was weakened by the long strain. She bore this very well; and for three days I injected fifteen minims of Magendie and the same of tinct. digitalis, morning and night, with happy effect. The sleep was longer and more refreshing and the waking intervals grew calmer day by day until all the excitement ceased, and her only complaint was the stiffness and soreness in her shoulder, which was soon relieved by the application of a fly blister. Her alkaline and tonic treatment combined was continued until she fully regained her strength and activity. During the year that she passed since then she has been in good health; but, on questioning her closely a few days ago, she acknowledged that she is not able to walk as far and as fast as she used to, from a tight feeling about her chest. This may be due to her increasing weight, or it may be from some valvular changes which often result in such cases, though, as yet, the heart sounds do not confirm that suspicion. From her past experience she has learnt how to take care of herself, and every precaution will be observed to prolong her valuable life to her family and friends.

It would be a happy thing if all all such cases could be expected to terminate so favorably; but the records of Dr. Fuller's and Trousseau's cases give us no such hope.

Among Dr. Fuller's reports, the case most like the one I have given proved fatal.

She was a young woman much exhausted by hard work. Admitted into St. George's Hospital on the 24th of January with all the symptoms of an attack of acute rheumatism and a catching pain in the cardiac region. Pulse quick, but not sharp; a soft systolic murmur audible over the base of the heart, thought to be only of anæmic origin. "In short no evidence could be observed of mischief within the chest." On the 31st, delirium first began. This was mild at first in the morning, increasing at night. The morning subsidence became less marked, and becoming more and more violently delirious, she lapsed into a state of coma and expired on the morning of the 3rd of February, this condition of cerebral disturbance lasting about ten days.

After coma supervened she was bled to six ounces, and the blood was neither buffed nor cupped. The post-mortem examination led Dr. Fuller to this conclusion, which I had better quote than try to condense:

"Here, then, is a remarkable case in point. The patient was a sort of servant of all work, who had been, for some time, sitting up at night nursing an invalid. She was much exhausted by her labor, and the loud anæmic murmur which was heard throughout the attack, and the crop of sudamina which very shortly appeared, attested the correctness of that theory. Then came the delirium, indicative of the irritability consequent on that exhaustion; and, in direct corroboration of the evidence afforded by the symptoms, the blood drawn from her arm was neither buffed nor cupped.

After death, the chain of evidence was completed. The brain and its meninges, the lungs and their envelopes, the heart and its membranes, both external and internal, were close-

ly and carefully examined, but no trace of inflammation could be found, and the fact became apparent that the symptoms observed during life were due to the morbid blood acting upon the nervous centres, rendered more than usually susceptible of irritation by the exhaustion to which the patient had been subjected. The delirium was obviously referable neither to congestion nor to inflammation, but to excitement without power."

Indeed, inflammation of the brain or its meninges seems to be a very rare occurrence in connection with rheumatism; so much so that Dr. Fuller mentions only three cases. They are briefly these: "A man who had suffered long from rheumatism was admitted to the hospital with his joints inflamed and swollen. One day his knees, which had been greatly swollen, became very much smaller and flaccid, and coincidently with the subsidence of the swelling, he complained of pain in the head, became paralysed on one side and expired in the course of thirty-six hours.

On opening his body a large quantity of greenish looking purulent matter was found smeared over the greater part of the surface of the left hemisphere, and there was considerable effusion into the ventricles. So in a case of Dr. Watson's. A female patient who had rheumatic fever and subsequent cerebral symptoms, died in the Middlesex Hospital, and upon examination of the brain, unequivocal pus was found smeared over the hemispheres.

So, again, in a case reported by Dr. Fife. A man 36 years of age, after suffering for some days from acute rheumatism, was seized with delirium and unequivocal symptoms of cerebral inflammation. Life continued for five days longer, and throughout that period there was either muttering delirium or a state of perfect coma. On the fifth day, at noon, he died, and dissection showed the membranes

of the brain covered with lymph and pus, the vascularity of the brain enormously increased and the lateral ventricles distended with serum—sufficient indications of true inflammation.

In these three cases, and indeed in all similar instances, of which I can find records, the cerebral inflammation does not appear to have been simple extension of the disease, but to have been excited by the concentration of the rheumatic virus upon the brain in consequence of the sudden subsidence of articular inflammation."

"Whether recovery does ever take place when the delirium is dependent upon cerebral inflammation, it is impossible from experience to decide, inasmuch as convalescence itself forms a bar against our only source of positive information. But if, in any case accompanied by symptoms of active cerebral disturbance, no cardiac or pulmonary disease should be detected, it would be right, *cæteris paribus*, to speak more decidedly as to an unfavorable issue, than if the stethoscope had revealed mischief within the chest."

Some of Dr. Fuller's fatal cases, after death, showed such cardiac lesions as to prove that the embarrassed circulation alone, was sufficient to account for the cerebral disturbance, without any other cause. And it is this complication of rheumatism which we most frequently meet with, and which comes on so warily that it requires the utmost vigilance to detect at times.

To show how much importance Dr. Fuller attaches to this view I beg to quote another expressive sentence from his book:

"Thus, then, it would appear that in all cases where disturbance presents itself during the course of acute rheumatism, the altered condition of the blood is its primary or proximate cause; that neither delirium nor coma are *necessarily* accompanied by any internal inflammation, whether of the

brain, the heart or the lungs; nevertheless, internal inflammation, more especially of the heart and lungs, is very liable to arise as a consequence of the irritation of the vitiated blood, and when so arising, is apt to be accompanied by sensorial derangement, for the reason that, under the circumstances of the case, it makes up the sum or amount of derangement which is requisite to disturb the brain's equilibrium. Indeed, so rarely is such disturbance effected in acute rheumatism without its influence, that for all practical purposes, delirium may be considered as indicative of some commencing internal complication, and very generally of inflammation of the heart."

The literature of this subject is so sparse that I have dwelt longer on Dr. Fuller's views than I would otherwise have done

Dr. J. L. Hicks, of Flushing, L. I., in an article in the *Medical Record* of November 16th, 1878, thus refers to an elaborate and interesting paper of Dr. Da Costa's on Cerebral Rheumatism, which I have not seen, I am sorry to say. It is in the *American Journal of Medical Sciences*, January, 1875, and brought to my notice too late for me to review it here. A few sentences from Dr. Hicks' reference to it will suffice to show that there is little difference in it from the views already quoted by the older author. "Of twelve cases, eight ended fatally. No examination of the brain was made in three of the eight. Bright's disease existed in two and possibly in one other, in which no autopsy was made, but in which albuminuria, but no casts were found."

Pericarditis and endocarditis occurred in two cases. In the others no cardiac lesions of material importance were discovered. Plugging of the finer brain vessels was found in one case, and, in the opinion of the author, in another that recovered,

though he admits the possibility of true meningitis having existed in this instance.

In case eight, in which it is to be regretted no examination was made, there were symptoms which pointed very decidedly to meningitis, or at least to localized intracranial pressure. Be that as it may, in none of the autopsies was true meningitis met with.

The rarity of this complication is illustrated by the fact that only five or six lines are devoted to the subject by Lenton, in his article on Acute Rheumatism in "Ziemssen's Encyclopedia," merely stating two or three authors who have reported such cases. Niemeyer mentions the possibility of acute meningitis in acute rheumatism, while Hammond has met with one case, the particulars of which, however, are not given. Other authorities are almost equally meagre in their accounts of this disease; and from the testimony that is presented, it is impossible to avoid the conclusion that of the cerebral complications of acute rheumatism true meningitis is a rare event.

CANCER OF THE PROSTATE.

BY RANDOLPH WINSLOW, M. D.,

Demonstrator of Anatomy, University of Maryland.

(Read before the Clinical Society of Maryland, Feb. 3rd, 1882).

The prostate gland enjoys very great immunity from cancerous affections, more so, perhaps, than any other organ in the body. Why cancer should select some tissues for its frequent seat, and almost entirely neglect others, is a subject full of interest, but as yet not understood. It is the harder to understand this in the case of the prostate, as it is a musculo-glandular organ of considerable functional importance, and is situated in close proximity to the bladder and rectum, both of which are frequently the seat of cancerous growths. Whilst

it is excessively rare for cancer to affect this gland, the frequency of senile hypertrophy is proverbial; and acute inflammations and abscess are not rarely met with.

The first systematic treatise on diseases of the prostate is that of Sir Everard Home, published in 1811, and a second edition issued in 1818. He does not even mention, in either edition, cancer as being one of the diseases to which the prostate is subject. Bingham, writing in 1822, mentions cancerous fungous projections from the prostate as a cause of retention of urine, which, by falling against the orifice of the urethra, acts as a ball and valve. The affection here described by Bingham is evidently a villous tumor, which may or may not be of cancerous nature, and it is probable that in these cases the tumor is not attached to the prostate but to the mucous membrane of the neck of the bladder. Howship, writing in 1823, mentions schirrous induration of the prostate gland in old persons, but it is easy to recognize in this description the senile hypertrophy, which is so often present. Guthrie says nothing about cancer of this gland in his book published in 1834, nor does Wm. Acton, who wrote in 1852. Wm. Coulson, in 1857, says the prostate may be enlarged or may contain medullary nodules consecutive to cancer of the bladder, but this is rare, and the organ is not often involved in cancer of the bladder. Whilst he has never met with true scirrhus of the prostate, hardness may be caused by any deposit, which stretches but does not break the capsule. "The so-called scirrhus of the prostate," says Civiale, "of which so much has been spoken by Bailie, Desault, Chopart and others, is nothing more than considerable induration of the gland, the tissues of which sometimes acquire sufficient consistency to creak under the knife."

As to cancer, it is so rare that Prout and Cruveilhier affirmed they

had never met with it. Rokitsansky says: "Cancer in any shape rarely occurs in the prostate. Medullary carcinoma may occur occasionally, giving rise to considerable enlargement. It may perforate the fundus vesicæ and sprout into its cavity, causing a cancerous ulcer with raised edges." Coulson has met cases of medullary cancer, but not of true scirrhus of this gland. Phillips, in 1860, said: "Recent microscopic studies have proven the great rarity of cancer of the prostate. All forms occur, encephaloid is the most frequent, then colloid, melanotic and fibro-plastic." It may occur at all periods, from infancy to old age."

Sir Henry Thompson says: "The prostate gland may be subject to cancer, either primary or secondary; either is very rare, especially secondary involvement, but cancer of this organ is not so rare, as is usually supposed, Tanchou's statistics being defective. In 8,289 cases of death from cancer, tabulated by Tanchou, there were only 5 deaths from prostatic cancer; but as only 2,161 of these cases were males, and in 829 the seat of disease was not reported, it leaves 1,904 deaths in males from cancer, and 5 of these from cancer of this gland, or 1 in 380. When the prostate is secondarily invaded it is almost always consecutive to cancer of the bladder. Sir Henry has only once seen it follow cancer of the penis. Encephaloid is the most frequent form in children always, and in adults the exceptions are very rare. He believes with Dr. Walshe, who wrote in 1846 that the evidence of the occurrence of true scirrhus is defective. Malignant disease of the prostate is only observed in childhood and in advancing age, no cases being reported between 8 and 41 years. The duration of the disease varies from one and a half to five years in adults; from three to nine months in children.

Van Buren and Keys, in 1875, state

that "primary cancer of the prostate is exceedingly rare." They differ from Sir Henry Thompson in stating that prostatic cancer is "usually secondary to advanced malignant diseases elsewhere, especially in the kidneys or testicles." In *Amer. Journ. Med. Sci.*, July, 1877, is the abstract of a primary case of true scirrhus of the prostate occurring in the service of Dr. Dickinson at the Northern Hospital of Liverpool, the diagnosis being verified by subsequent microscopic examination.

Agnew and Bryant each consider prostatic cancer to be generally secondary to disease elsewhere.

The symptoms of malignant disease of the prostate are those common to obstructive affections of the bladder and cystitis, but are usually more rapidly induced, and of greater severity. There is nothing distinctive in the symptoms, and the disease is generally far advanced when recognized. At first there may be no subjective symptoms, but as the prostate enlarges there will be pain and increased frequency of micturition; subsequently there may be obstruction, requiring the use of the catheter, and hemorrhage from the urethra or bloody urine; the urine will also contain an increased amount of epithelial debris. Pain will be felt in the perineum and rectum, or radiating down the thighs, or into the back, and this pain is often very intense. Emaciation will be rapid and progressive. The local symptoms are not more distinctive than the general; there is always some enlargement of the organ; sometimes this occurs very rapidly. The tumor is irregular in size and consistence, sometimes being hard and tense, sometimes soft and semi-fluctuating. The glands accompanying the iliac vessels are generally enlarged and may be felt through the abdominal walls in some cases.

The treatment is, of course, only palliative, consisting of treatment of the accompanying cystitis, relief of

urinary obstruction by the judicious use of the catheter, and when the obstruction is complete, an artificial opening may be established above the pubis. Anodynes by the mouth or in suppositories will always be required. Hemorrhage is occasionally a troublesome complication, which requires appropriate attention. Tonics, stimulants and judicious alimentation have their place in the treatment of this necessarily fatal disease.

SOCIETY REPORTS. •

CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD JAN. 20TH, 1882.

F. T. MILES, M. D., in the Chair.

COLOTOMY.—*Dr. Coskery* exhibited the patient operated on by him five weeks before for epithelioma of the rectum (see Clinical Lecture, MD. MED. JOURN., Jan. 15th). The artificial opening made in the left lumbar region looks well. There has been no pain nor bleeding since, and no fecal matter has passed per anum. The extremely offensive odor which formerly characterized the case is gone, the rectal ulceration is improved and the patient is getting fat. A swollen gland may be felt in the left groin. The operation had been only done with a view to relieve the bleeding and offensiveness. *Dr. Coskery* had exhibited before the society two years ago a man, æt. 49, upon whom he had performed a similar operation. He pointed out that the kidney should be the guide in seeking for the bowel; first find that and then proceed forward.

Dr. Michael said the case was an answer to the unfavorable comments made upon such operations. He approved fully of the operation; it was as justifiable as anodynes in pain. He had made a perineal opening in cancer of the penis with satisfactory results, the patient continuing to pass

water through it up to the time of death.

HEMI-ANÆSTHESIA AND EXTENSOR PARALYSIS OF FOREARM.—*Dr. John Van Bibber* presented two patients, with the following description: The first, a woman, advanced in life, had been under treatment two months for a peculiar anæsthesia affecting the right arm, shoulder, neck, face and eyeball. It ceased abruptly at the median line. There was also paralysis of motion. Under treatment by the battery the anæsthesia had improved. Lately the patient had had some symptoms in the other arm also. *Dr. V. B.* believed the source of the trouble to be central—the sensory centres of the cortex of the brain. It was not hysterical. The second was a case of extensor paralysis of the left forearm in a young man. On the 7th of January he fell asleep on his arm, producing complete wrist-drop. He had been treated with electricity and an elastic appliance, fitting on the fingers like a glove, and extending thence by rubber bands along the back of the forearm to the arm above the elbow, the object being to supply the place of the helpless extensors. *Dr. V. B.* stated that very marked improvement had taken place in about ten days of such treatment—the duration otherwise being about three months.

Dr. Miles usually employed extension in such cases and believed electricity hastens the cure. Patients often exhibit an increase of power immediately after the use of the constant current. He believed the first case to be one of hysterical hemi-anæsthesia. *Dr. M.* had seen her some time ago by the kindness of *Dr. Van Bibber* and the anæsthesia was not complete. The patient at that time could not bear a very strong current with metallic brush on the affected arm. She had considerable power in her hand. The limitation of the trouble to one side was not conclusive against the hysterical nature of

the affection; Charcot has described hysterical cases thus characterized.

Dr. Harlan said such cases (as the last reported by *Dr. Van Bibber*) get well without any treatment, as in a case of facial paralysis cited, with quick recovery. Electricity is not necessary. The faradic current may be used in diagnosis.

SUBCUTANEOUS HERNIOTOMY.—*Dr. Robert W. Johnson* read a paper with this title. His object was to bring forward an instrument for the treatment of strangulated hernia, which is "to combine the safety of taxis with the certainty of herniotomy." This instrument is a knife about eight inches long, which, when closed, resembles a probe with a blunt point projecting from one end of the handle; from the other end, capped by a nut, projects a thin piece of steel covered by a removable button. The essential parts of the instrument are a hollow handle four inches long, with a flat canula three inches long, attached to it; second, a long piece of steel terminating at the upper end in a screw, whose thread fits into the nut on the upper end of the handle. The lower end of the second piece terminates in a knife blade moderately dull and capped by a bent probe point, concave on the cutting-edge of the knife, shouldered and fitting flush with the canula.

The probe point may be made to penetrate cellular or muscular tissue without injury to vessels or nerves. At any time it may be changed into a herniotome by pushing the probe point forward and exposing the blade. This latter is too dull to cut any parts but those on the stretch, as the ring constricting a hernia.

The method of operating (as in inguinal hernia) consists in making first a small nick in the scrotum below the sac; into this the probe point is inserted and passed up in front of the sac to the ring. It is insinuated through this when the blade may be

exposed and the constriction divided. The result of this is that circulation will recommence and taxis may be successfully resorted to.

The author did not think the operation applicable to femoral hernia, but he did to umbilical and ventral hernia. He had not used his instrument upon a case of hernia, either upon the living or dead subject, but as far as experiments upon the normal cadaver went they had been favorable to his views. He designed his operation for those cases where taxis, with its adjuvants, ice, chloroform, &c., had failed, and the only alternative was the knife.

OVARIAN CYST.—*Dr. C. H. Riley* exhibited a specimen of a unilocular ovarian cyst taken from a multipara, æt. 40. He had aspirated her previously three times, removing last July sixty pints of fluid, in October forty pints, and in December forty pints. The operation was done January 4th under ether, and with the spray and antiseptic dressings. The instruments were also washed in carbolic water. The sac was very adherent, especially to the intestine and posterior uterine wall. The pedicle, which came off from the right side of the uterus, was ligatured and returned. Symptoms of peritonitis-tympanites, pain, vomiting, fever, frequency of pulse, &c., appeared in a few hours, and death ensued about thirty-six hours after the operation. The incision had then healed. No post-mortem could be obtained.

Dr. J. Shelton Hill suggested that the prospects of recovery would have been enhanced by opening the abdominal incision, which had healed by the first intention. The pulse and temperature are reported to have been normal fourteen hours after the operation, and all the indications at that time seem to have been favorable for a rapid recovery. Yet in thirty-six hours from the time of operation the patient died. It is rare for peritoneal inflammations, under such circum-

stances, to destroy life in so short a time. Septicæmia probably concurred in producing the fatal result. He would have opened the abdominal incision, washed out the abdominal cavity and employed free drainage. By tearing open the united edges of the incision, and allowing free drainage, he had obtained good results in impending septicæmia following operations for the relief of strangulated hernia.

SUPPURATION OF KNEE-JOINT—AMPUTATION.—*Dr. Coskery* exhibited a knee-joint with the following history: A patient, an oyster-shucker, had acute symptoms of trouble about his knee-joint four months ago. These passed away but left the knee always weak. Two weeks ago the patient entered hospital, presenting a large fluctuating tumor just above the right knee, outer side; this was supposed to be a pus cavity, and strumous arthritis was diagnosed. The tumor was laid open without the discharge of pus but a free discharge of blood. From the time of puncture the symptoms grew worse and hectic soon set in. The limb was put up in a splint. To-day amputation was performed just above the condyles. On examining the joint after removal, the bone was found to be necrosed, pieces of bone being in the joint which was filled with blood and pus. The cartilaginous surfaces of the joint were almost completely destroyed.

SARCOMA OF FOOT—AMPUTATION.—*Dr. Gorter* exhibited a specimen of a foot in which a cancerous growth had developed, necessitating amputation just above the ankle five weeks ago. The growth began sixteen years ago as an epithelioma of the skin. The patient had suffered intense pain, but for a long time refused an operation. The disease had developed in the groin two years ago, and the only object sought by the operation was relief of pain, and this had been accomplished. The stump was slowly heal-

ing. The patient was aged 63. Microscopically, the growth was proven to be a spindle-celled sarcoma. There had been no examination of the nerves.

TREATMENT OF IRREDUCIBLE EPILOCELE.—*Dr. Tiffany* read a paper on this subject (published in the last issue of this JOURNAL).

EDITORIAL.

SEWERAGE IN EUROPE.—No subject relating to the sanitary condition of Baltimore can compare at this time in importance with that of its sewerage. Hence we do not think we can err in bringing it again and again to the attention of our city readers whose influence is or should be great in all that relates to the health interests of our city. We recently had occasion to refer to the report made by Mr. Latrobe, C. E., to the Mayor and City Council upon the Sewerage system, as it exists in several of the cities of this country, and to point to his conclusions in favor of the separate system—that which has been introduced into Memphis. In passing, we would only mention the singular discrepancy between Mr. Latrobe's statement that the Memphis system is "well planned and well executed and fully answers the purpose for which it was intended," and some recent correspondence (letter of Dr. R. B. Maury of Memphis, *Med. News*, Feb. 11th, 1882,) on the subject, indicating quite the opposite condition of things, together with the high rate of mortality, the highest of any American city, prevailing in that ill-fated place. In contrast to the conclusions of Mr. Latrobe, we are able to present the results of a personal and ocular examination into the sewerage works of eleven of the principal European cities—viz: London, Paris, Berlin, Vienna, Liverpool, Hamburg, Frankfort-on-the-Main, Dantzic, Brighton, Oxford, and Amsterdam—made by Mr. Rudolph Hering, Civil and Sanitary Engineer, by direction of the National Board of Health. This report is contained in Supplement No. 16, National Board of Health Bulletin, of December 24th, 1881, and shows very evidently that a vast amount of time and

labor must have been spent in its preparation. It contains most minute and elaborate details and statistics of the cities mentioned together with the author's conclusions derived from them. The subject of sewerage is considered in all its aspects, sanitary, economic, mechanical, and the author shows throughout a mind unbiassed by any preconceived views.

The report opens with a description and comparison of the chief methods of sewerage in use at the present time. They may all be classified under two heads entitled respectively "dry removal" and "water carriage." The common cess-pit, although its cheapness causes it to be retained in most of our American cities is properly condemned except in the case of isolated country houses and then only when at a distance from the dwellings and when the contents cannot pollute the drinking water; it has been entirely prohibited in several of the European cities. Dry removal may be effected at frequent intervals without disinfection or at longer intervals with disinfection, this being accomplished by means of absorbents as charcoal, or by antiseptics, as carbolic acid, etc. Its utility is limited, but in this contracted field it is capable of rendering undoubted service. The dry earth closet is an example.

Sewerage proper, or that form which is adapted to use in cities, is defined by the author as "a system of continuous underground pipes or channels causing an immediate and complete self-removal of all excreta and waste water from the dwelling to the place of final disposal." There are two forms in which it is carried on, the "combined" and the "separate" systems, and upon the merits of these there has been the greatest variance of opinion. The former is that in which the sewers serve the double purpose of removing both sewage and rain-water. Inlets are here provided for the latter along the streets, in the yards, &c., which are guarded by traps where necessary, and by catch-basins to prevent sand, &c., from entering the sewers. The escape of foul gases into houses, &c., is prevented by means of traps near the inlets. Ventilation is provided for the escape of foul gases by chimneys, pipes

terminating above the roofs, and by open gratings in the roadways. The sewage is disposed of either by emptying it into large rivers, or by means of intercepting sewers which separate it from the rain-water and carry it to a locality where it is purified. Among the advantages claimed by the advocates of the combined system are the cleansing effect and economy of having large quantities of storm-water conveyed periodically through the sewers, the removal of dirt and filth from the streets and roads, the greatly facilitated inspection and cleaning together with the lessened possibility of obstruction from the large-sized sewers, the increased facility in managing a single system alone, the avoidance of the danger of making connections to the wrong sewer (which has often occurred where two systems of sewers were found in the same street), the appliances for flushing and the economy. That "the cost of *two* sewers to accomplish the same object as *one* will generally be greater," seems to be a self-evident proposition. The objections made against the combined system, says the author, only have weight when it is imperfectly designed, maintained or applied, difficulties to which built, the separate system is even more exposed. "The best examples of this system were found at Frankfort, London, Hamburg, Brighton, Liverpool and Berlin."

The "separate" system originated from causes which were mainly financial. Several forms of it are in use, as the "Ordinary" separate system, used in England, the "Shone" system, which is still upon trial—not having been introduced as yet except upon a small scale and in the way of experiment—and the Liernur system. The ordinary separate system, as used in England, "consists of a pipe line extending into each house, there to receive the house drainage generally with an admixture of some rain-water from the yards and back buildings. The rest of the rain-water, where it cannot flow off in surface channels, is carried off through separate sewers." The object of the rain-water introduced into the sewage pipes is to secure an occasional flushing. A self-acting flush tank has lately been invented by a Mr. Field, which is designed to substitute artificial

for the natural flushing but its utility has not yet been thoroughly established.

The "Shone" system is intended for use where the sewage requires frequent "lifting;" this lifting is effected by means of self-acting ejectors operated by means of compressed air.

The "Liernur" system, introduced in 1871 and named from its inventor, is only used in Holland. It accomplishes upon a large scale what is done in this country, and abroad by means of cylinders from which the air is exhausted—either previous to use or upon the premises, the only difference being that in the Liernur system a large central cylinder, communicating with a large number of houses by underground pipes, is employed. It is peculiarly applicable to a low and flat region intersected by water channels. It only disposes of the excreta and toilet water.

The chief advantages of the separate system are that by it pollution of streams is avoided and purification of sewage is facilitated. Otherwise, the author does not regard this system as superior to the combined. The following points are mentioned as determining the suitability of the separate system: When rain-water can be allowed to flow off on the surface or in a few channels below it (this applies to rural districts and to steep slopes or hill-sides); where an old system of existing sewers can be utilized for the transmission of the rain-water alone; where purification is expensive and the stream into which the sewage would be emptied is used for domestic purposes below, &c.

"It is extremely doubtful whether Liernur's system can compete with the other systems in any locality." "Good examples of the ordinary separate system are found at Oxford, Reading and Tottenham." The Liernur plan is best studied at Amsterdam.

The subjects of design and construction (including alignment, junctions, ventilation, various modes of flushing, and management, &c.) are very fully considered. The cost and disposal of sewage also receive due attention; in reference to the latter the author's investigations go to prove that the sewage cannot be utilized as manure, but that the best method of disposing of it is to dis-

charge it into rivers or the sea, after purification by irrigation, filtration or precipitation.

Of course in the brief space at our command it is impossible to bring out all the merits of such a paper as this, which is a perfect store-house upon the subject of which it treats, but we may consider the following to be the general results of the author's study and investigations. What is demanded of a system of sewerage is that it shall prevent decomposition, and this is best obtained by a rapid, steady and complete removal of all decomposable matter such as coincides with the development of germs, by the removal of solids which may obstruct the flow and by provisions for the free escape of vitiated air. No one system is adapted to all places and situations. The superiority of one system over another depends more upon the locality and the maintenance it receives than upon any inherent excellence. "The factor therefore which will mainly govern a preference is less the sanitary value, as frequently asserted, than the cost of construction and maintenance." Much of the adverse criticism and complaint against the different systems depend more upon mental bias, ignorance in regard to the circumstances of particular cases, or faulty construction and maintenance, than upon essential defects. Finally, it is difficult to trace any difference in the death rate as the direct result of sewerage works, since cities having a very inferior system, as Philadelphia, show a lower death rate than others, as Memphis and New York which have better systems.

A catalogue of publications relating to the subject of sewerage is appended to the report.

The whole report will well repay perusal, being a concise and apparently impartial survey of the entire subject by an observer who evidently possesses unusual fitness for the work.

"USE AS DIRECTED."—One would suppose that physicians, at least, would be so fully impressed with the dangerous character of many of the drugs they constantly employ as to need no caution regarding their use. Yet that such is not the case the personal experience of

many, if not all, of us will attest. That accidents have not been more frequent from our negligence is due to the watchful care and vigilance of our faithful allies, the druggists, who, were they so disposed, could doubtless reveal many things which it were better for the peace of mind of our patients should not be known. One of them—Mr. Charles J. Shulmyer, of Lancaster, Penna., draws attention in a letter published in *Martin's Chemists' and Druggists' Bulletin and Medical Advocate* for January, 1882, to a species of negligence on the part of physicians, which will be obvious, upon reflection, to all, i. e., the neglect to give proper directions as to the mode of using our prescriptions. Of the prescriptions on his files, he finds that fully 22 per cent. are without any directions whatever, 10 per cent. have only "Use as Directed," whilst, of 200, 7 contain opium enough to cause trouble should any but the regular dose be taken. Yet not one of them has a word of direction on it. Now many persons, as he says, will reason that if the medicine were dangerous it would be accompanied by particular directions as to taking and not be labelled "Use as Directed;" hence, with such a direction, they would not hesitate to take more than the prescribed amount. Moreover, in numerous instances, from want of attention or forgetfulness, the exact verbal direction will be forgotten by the patient or his attendants; under these circumstances the druggist is asked for information, which he must either supply by guessing or after delay and trouble in finding the physician. Further, the druggist is thus rendered powerless to correct any possible errors in regard to dose, &c., which deprives us of that safeguard against fatal mistakes to which we have alluded. These criticisms are, we must confess, well grounded, and it is well that they should be brought to the attention of the profession. However hurried the physician may be, he should always take time to give minute directions, written as well as verbal, especially in the use of remedies of a dangerous sort.

REVIEWS & BOOK NOTICES.

The Science and Art of Midwifery. By WILLIAM THOMPSON LUSK, A. M., M. D., Professor of Obstetrics and the Diseases of Women and Children in the Bellevue Hospital Medical College, etc., etc. D. Appleton & Co., Publishers, New York, 1882. Pp. 663. With numerous Illustrations.

The author of this book is a well-known teacher in the Bellevue school. He has been a frequent contributor to periodical medical literature, and is recognized as a writer of originality and of large experience.

So far as we know, this is his first attempt at authorship in the form of a treatise designed as a text-book and work of reference. His preparation for the task he has performed has been thorough, and we were led to expect just such a book as he has given us. The volume brings with it no disappointment. It will compare favorably with the well-known English, French and German authorities upon midwifery.

There are many facts connected with the book worthy of mention. As was to be expected it is the representative of the American practice of midwifery, and embodies the views and experience of an American teacher and observer. It reflects much of the author's personality, and to this extent commends itself for its candid, practical and independent opinions. The author shows throughout the volume an effort to be accurate in his statements, and he has subjected theoretical doctrines to vigorous test with the purpose of presenting, as far as possible, accurate scientific knowledge. The book is remarkably free from lengthy discussions of theories and uncertain rules of practice. Whilst the work shows that the author has drawn upon his own large experience for many of the views he presents, it is equally apparent that he has given much study to the writings of others. This is shown by frequent reference to well-known authorities. The German authorities have received special prominence. We find frequent references to the investigations of Spiegelberg, Schroeder, Ahlfeld, Schatz, Lahs, Luschka and other original observers. From these sources

the author has drawn valuable suggestions, which he has been prompt to place at the disposal of his readers. Recognizing the fact that gynecology and obstetrics are kindred subjects separated by no natural line of division, the author has pointed out the importance of appreciating the dangers of a faculty practice of obstetrics and the means of correcting such accidents as may occur during parturition. The doctrine is carefully taught that the accoucheur should possess, with a knowledge of his art, an ability to repair surgical injuries at the time of their occurrence.

A work which possesses so many points for favorable mention can merit but a small share of criticism. The errors which occur to us are those of omission rather than commission. Many of the subjects have been treated in a clear and comprehensive manner, presenting, we believe, the main facts as they should appear in a text-book. Several subjects, however, are lacking in the details essential to a clear study of them. This is noticeable in the chapters on the "Conduct of Normal Labor," on "Extra-Uterine Pregnancy," and on "The Forceps." A book lacking in nothing would be a remarkable production, hence an author cannot hope for absolute perfection in his writings. The first edition of a work so free from pedantry of style, from inaccurate and rash statements must commend itself to the profession. The defects which exist will no doubt be fully pointed out by competent critics, and subsequent editions will probably contain such alterations and additions as will add largely to the popularity and usefulness of the work. It is with genuine pleasure that we bring any American text-book on obstetrics to the notice of the profession. We take special pride in referring to Dr. Lusk's book. Upon the whole it does credit to American authorship, and we believe it will take its place side by side with such well-known works as those of Flint, Hamilton, Thomas, Dalton, Gross and other well-known authors in the different departments of medical science. The want of such a work by an American author has been felt for sometime. This want is now supplied, and the profession

will accord to this treatise the favorable reception it so well merits.

Nervous Diseases. Their Description and Treatment. By ALLAN McLANE HAMILTON, M. D., Fellow of the New York Academy of Medicine, etc., etc. Second edition. Revised and enlarged with seventy-two illustrations. Pp. 587. Henry C. Lea's Son & Co., Philadelphia. 1881.

Several years ago we introduced to our readers the first edition of Dr. Hamilton's book. We then anticipated for it the favorable opinion of the profession. It is now our pleasure to call attention to a second edition fresh from its author's pen with such additions as were called for by recent advances in neurological medicine. The author has given the book a thorough revision, so that it comes to us in a new dress and with such new features that we see but a slight resemblance to the first edition. The most striking feature is an addition of a large number of new cuts, which fully illustrate the text and enhance its usefulness to the reader.

The very practical and concise way of stating the subject matter have been preserved so that the book retains its happy choice of expression and striking value as a text-book for students. The author aims to make himself understood. The arrangement of subjects and discussions of the same are well calculated to instruct and impress the reader. The rapid advances in neurology renders a thorough review of this subject necessary at frequent intervals. Dr. Hamilton fully appreciates this fact by embodying in his work the most recent physiological and pathological observations and such suggestions as to diagnosis and treatment as are fully established.

MISCELLANY.

THE WOMAN'S MEDICAL COLLEGE OF BALTIMORE.—This institution, designed exclusively for the medical education of women and similar in its purposes and scope to like institutions in Philadelphia and other American cities, was incorporated on the 20th ult. with

the following Faculty: B. Bernard Browne, M. D., Professor of Diseases of Women and Children and Clinical Obstetrics; Thos. A. Ashby, M. D., Prof. of Obstetrics and Clinical Gynecology; Randolph Winslow, M. D., Prof. of Surgery; Eugene F. Cordell, M. D., Prof. of Materia Medica and Therapeutics; Wm. D. Booker, M. D., Prof. of Physiology; Robert B. Morison, M. D., Prof. of Chemistry, Urinary Analysis and Toxicology, and Herbert Harlan, M. D., Prof. of Anatomy and Clinical Surgery. There will be a Woman's and Child's Hospital and Dispensary, a Nurses' Training School and a Directory for Nurses similar to the one in Boston, in connection with the college. The first course of lectures will commence early in the coming fall.

BALTIMORE EYE, EAR AND THROAT CHARITY HOSPITAL.—This is the title of a new hospital which has been recently incorporated in Baltimore for the treatment of diseases of the eye, ear and throat. Judge George Wm. Brown is President of the Board of Trustees, and the medical staff of the hospital is composed of the following well-known specialists: Eye and Ear Department, Drs. Russell Murdoch, Samuel Theobald, Samuel F. Frank and I. Bermann; Throat Department, Drs. J. H. Hartman, Samuel Johnston and John N. Mackenzie. The consulting surgeons are Drs. Christopher Johnston, L. McLane Tiffany, Alan P. Smith and O. J. Coskery; the consulting physicians, Drs. Ferdinand Chatard, Samuel C. Chew, Riggins Buckler and G. W. Miltenberger. It is understood that the hospital, which will have an out-door and in-door department, will be located in the western section of the city.

DANGERS DUE TO THE SUSCEPTIBILITY OF THE UTERUS.—Prof. Verneuil calls attention to the fact that although the uterus can generally be subjected with impunity to the most varied operations, there are yet certain women in whom, owing to a peculiar susceptibility, the most insignificant operations lead to grave accidents. A fatal peritonitis has been known to ensue from the simple vaginal touch. M. Verneuil cites two

cases of death occurring in women the subjects of cancer of the uterus; in one an application of perchloride of iron had been made, in the other the part had been lightly touched with chromic acid in order to check fungous projections. After the most simple surgical interference with the uterus it is, therefore, necessary to take the most minute precautions in order to avoid these possible accidents.—*L'Union Medicale*, Jan. 22.

VALUE OF EXPERIMENT.—The knowledge derived from experiment remains serviceable long after its novelty has passed away. The experimental observations of Galen on the recurrent laryngeal nerves, and on the functions of the arteries as blood-vessels, are as conclusive now as when he first made them, and retain at this day their full value. They have lasted for over seventeen centuries, and have survived during that time all the fluctuating medical systems of solidism, and fluidism, of animism, vitalism, archeism and iatro-mechanism. The information which they imparted was a reality, and is neither destroyed nor impaired by the lapse of time.—*Dalton, Cartwright Lectures, N. Y. Med. Record.*

INTERNATIONAL MEDICAL CONGRESS MEDAL.—*Prof. Christopher Johnston*, who attended the meeting of the International Medical Congress, held last August in London, as one of the delegates of the Medical and Chirurgical Faculty of Maryland, and also of the American Medical Association, has just received from England one of the commemorative medals struck by order of the Congress. It is of bronze, about three inches in diameter, and has on its face a raised profile portrait of the Queen, crowned with the inscription, "Victoria, Queen of Great Britain and Ireland: Empress of India." On the reverse, three figures representing suffering humanity, maternity, sickness and surgical infirmity, are kneeling before Æsculapius, who interposes between them and death. The inscription on this side is "International Medical Congress, London; James Paget, President; Wm. MacCormac, Hon. Secretary General." The medal is very handsome, and a most

finished piece of workmanship. The other members entitled to them will probably receive theirs shortly.

AETIOLOGY OF SCURVY.—Scurvy occurs in St Petersburg endemically. The largest number of cases is seen between March and May, the affection being then very common among the bargemen (Barkenführern) who flock to the capital at this time, and who, in a certain proportion, have very poor and monotonous diet, without either meat or fresh vegetables. Defects in diet (such as those above mentioned) are, according to the author, the chief cause of scurvy. Dampness and other states of the weather have no ætiological significance, nor has the author been able to convince himself of the miasmatic, infectious or contagious nature of the disease.—*Amburger, Centralblatt f. d. Med. Wiss.*, Jan. 7.

REGULATING PROSTITUTION.—The following resolution was adopted at the last meeting of the Baltimore Academy of Medicine: "That the Academy of Medicine protests against the passage by the Legislature of any bill regulating the registration and examination of prostitution." The secretary was directed to communicate this action to the Chairman of Health of both houses of the Legislature.

INOCULATION AGAINST TYPHOID FEVER.—Dr. T. H. Buckler, of Paris, proposes (*Bost Med. and Surg. Journ.*) the intestinal inoculation of individuals, especially children, with the materies morbi of typhoid fever, with the object of inducing a mild form of disease, which will prevent all future liability to it. Non-recurrence, he says, may be regarded as absolute in typhoid fever. "Outbreaks of typhoid disease occurring from a like cause" (contaminated milk supply) "instead of being regarded as unmitigated evils, should, on the contrary, have been looked upon as boons of unmixed good, and it would be a great blessing for all people under twenty years of age could they in like manner, and under favorable circumstances, become impressed with the contagion." He proposed a similar measure as a

prophylactic and remedy for incipient consumption.

FRENCH FACULTIES OF MEDICINE.—The salaries of the professors at Paris are \$2,600, and in the departments from \$1,200 to \$2,000. The agrégés receive from \$600 to \$800. The Faculty of Medicine of Paris has 64 professors and assistants; that of Montpellier, 35; that of Nancy, 30; that of Marseilles, 27; that of Nantes, 25.

ODOFORM FOR WOUNDS.—Mikulicz claims that iodoform is equal as an antiseptic to carbolic acid and is less dangerous. In open wounds it is simply sprinkled on. In septic, gangrenous or sloughing wounds it was specially satisfactory. In strumous diseases it is almost a specific. In lupus its effects are gratifying, the epidermis being destroyed if necessary by a solution of caustic potash. In deep wounds pencils made with cocoa butter (one part to two) and for injection a twenty per cent. ethereal solution are recommended. Local irritation can be prevented by previously oiling the sound skin.—*Wiener Klinik*.

LITHOLOPAXY IN VIENNA.—Until the adoption of the Bigelow method, Bilioth says that he had practiced lithotripsy on 43 patients, in two of whom he was compelled to suspend the operation and lithotomize. Of the other 41, the average number of sittings was $3\frac{1}{2}$, and these never longer than 10 to 15 minutes. Lately by litholopaxy the sittings have been prolonged, and in one recent case it reached nearly two hours, yet in none was there any excessive reaction or other accident. The only fatal case after litholopaxy was due not to the operation but to hemoglobinuria, probably due to poisoning by chlorate of soda, of which the patient had taken about 3 xi within four days. *Dittel* had had ten cases of litholopaxy; all successful. He believes that in future lithotomy will be limited to children, to cases complicated with diverticula and to so-called pipe stones.—*Centrabl. f. d. Med. Wiss.*, Dec. 24th.

TREATMENT OF MITRAL AFFECTIONS.—*Dujardin Beaumetz*. In the

second stage of mitral affections, when the tonic force of the heart muscle needs reinforcement to compensate for the disturbances resulting from mitral narrowing and aortic insufficiency, the two principal heart tonics are digitalis and bromide of potassium. Let $7\frac{1}{2}$ grains of powdered digitalis leaves be macerated in $\frac{3}{4}$ iv cold water for six to twelve hours, and let this be filtered and taken during the first day; the next day let 6 grains be so administered; the third day $4\frac{1}{2}$ grains; the fourth day 3 grains; the fifth and sixth days $1\frac{1}{2}$ grains, in order to avoid exciting intolerance of the drug. During the next six days discontinue the digitalis and order 15 to 30 grains of bromide of potassium daily, dissolved in a glass of milk. Stop one day, then recommence treatment, giving alternately the digitalis and the bromide, omitting, however, for one day, when the change is made from one to the other. Digitalis should be interdicted as soon as granulo-fatty degeneration of the heart muscle occur.—*L'Union Medicale*, Jan. 22,

CHANCER OF THE CERVIX UTERI.—

In the Mjasnitzki Hospital, at Moscow, in the course of more than four years, of 1374 cases of chancre on various parts of the organs of generation and their vicinity, 117 chancres of the cervix uteri were observed, of which 13 were hard chancres with subsequent general infection. They occurred equally upon the anterior and posterior lip, but were somewhat more numerous at the os. In form and size very variable, in depth they always fell below chancres of the skin. The course in the majority was protracted in consequence of complications (catarrh of cervix). The author concludes that chancres in this situation are more frequently present and more easily recognizable than most gynecological authors allow, for in the majority of the cases the cartilaginous hardness peculiar to the initial sclerosis was distinctly recognizable. No especial diagnostic significance is to be placed in inoculation.—*Rasumow, Cent. f. d. Med. Wiss.*, Jan. 7. Of syphilitic females treated at Sigmond's clinic within a period of 27 months, in 5 per cent. *F. Marcek* found the initial lesion on the cervix uteri.

The site was most frequently the anterior lip, which may be accounted for by the nearly normal antelexion of the uterus. More than half the women had had children, indicating probable coöperative causes due to parturition. Sexual intercourse was to blame in every case. The chancres were distinctly indurated, and rarely ulcerated to any great extent. Among the most constant concomitants were papules on the vagina and labia—in only two of the twenty-four cases described was the trouble limited to the cervix exclusively.—*Vierteljahrschr. f. Dermat., and Centralblatt f. d. Med. Wiss.*, Dec. 17.

INJECTION FOR DYSENTERY.—Subnitrate of bismuth, powdered gum arabic, of each 3 ss, warm water $\frac{3}{4}$ ij. Inject one to three times a day in chronic and subacute dysentery. Tinct. opium may be added, and also of ipecac when not well borne by the mouth. In every case an injection of warm water should precede in order to remove the intestinal mucus.—*Union Medicale*, Feb. 4.

SOCIETY BULLETIN.—*Acad. of Med.* will meet Tuesday, March 7th, 8.30 P. M. *Clin. Soc. of Md.* will meet Friday, March 3rd, 8 P. M. Dr. J. D. Arnold on "Laryngeal Phthisis." *Med. Ass'n* will meet Monday, March 13th. Dr. J. Gilman will read a paper. *Med. and Surg. Soc.* meets every Wednesday, 8.30 P. M. *Obstet. and Gynecol. Section, Med. and Chi. Fac. of Md.*, will meet Friday, March 24th, 8.15 P. M. Dr. P. C. Williams on "Ergot;" Dr. A. F. Erich on "Metrorrhagia" *Ophthalm. and Otol. Section, M. and C. F. of Md.*, meets 1st Wednesday of each month.

MEDICAL ITEMS.

THE commencement of the Baltimore Medical College will take place March 7th. at the Academy of Music, at 12 M. Rev. Dr. McCauley, President of Dickinson College, will deliver the address.

=The Baltimore Medical Association was incorporated under the general laws of Maryland Feb. 20th.=Prof. O. J. Coskery has devised a very neat and convenient pocket case of instruments, which is to be had at the principal instrument makers of this city.=M. Charcot has entered upon the duties of his new chair—especially created for him—Clinical Professorship of Nervous Diseases.=We regret to learn that no papers have been presented for the Baltimore Academy of Medicine Prize this year.=The London Obstetrical Society has 774 members and a library of 3,056 volumes.=A bill to confer authority on the regents of the University of Maryland to grant degrees of doctor or licentiate of dental surgery, pharmacy or other cognate branches of medical science, is before the Legislature of Maryland.=One essay only was submitted for the prize of the N. Y. State Med. Society at its late meeting, and that was not deemed worthy of the prize by the committee.=The University of Pennsylvania has received during the past eleven months contributions towards its permanent endowment fund amounting to \$265,000.=What has become of the anatomical committee of the Faculty? Has it taken any steps to secure "legalization of anatomical study in Maryland?"=A. A. Surgeon B. F. Kingsley, U. S. A., says insects may be removed from the ear by simply holding a light before it.=Keith is said to have used a solution of carbolic acid one-tenth stronger than Lister's, a circumstance which he failed to state in his remarks at the International Med. Congress.=Dr. Reynolds (*Bost. Med. and Surg. Journ.*) says that the majority of cases of so-called adherent placenta are to be explained by the simple sticking of the placenta against the uterine wall just as a man's boot sticks when he has trodden ankle deep in clay.=Dr. E. Thomann, of Graz, has treated a series of cases of recent syphilis with well-marked skin affections and glandular enlargements, by the subcutaneous injection of iodoform (in glycerine, 6 to 20; dose 0.3 to 0.75 gramme) with very excellent effect. No abscesses occurred.=Goodell advises in hysteria firm pressure over the ovaries, a strong emetic (ipecac with a grain of

tartar emetic) and the application of a piece of ice over the nape of the neck.=Anybody may practice in England so long as he does not assume any title which implies that he is a legally qualified medical man. There is no legal resource against the open quack.=The six Faculties of Medicine of France conferred during the year 1881 621 diplomas of doctor of medicine, viz: the Faculty of Paris, 461; Montpellier, 66; Lyons, 44; Nancy, 19; Bordeaux, 18; Lille, 13.=An epidemic is said to prevail among the plantations of violets on the Rhone. The flower withers as if consumed by a galloping consumption.=Dr. C. Hilton Fagge, of Guy's Hospital, declares that experience has strengthened the conviction in his mind of the value of the salicylates in acute rheumatism, and he would never feel that he was accepting a grave responsibility if he were to withhold a drug which he believed to be so useful from any patient placed under his care unless there were some good reason for doing so.=The municipal council of Paris has voted to each of the 18 hospitals for the increase of their libraries \$100. The largest of these libraries are those of Bicêtre (2,404 vols.), Hôtel-Dieu (2,000), Salpêtrière (1,545), Tenon (2,200).=Dr. Grimes, of this city, recommends the administration of tinct. of iron in capsules; it can be dropped into an empty capsule, which can then be closed by putting on the cap-piece. Some water should be taken after the dose.=The recent census of London shows a population of 3,489,528; 1,633,321 males, 1,856,207 females. It contains 417,956 houses.=According to the *Journal d'Hygiène* 19,000 human victims on the average succumb annually in India to the teeth of tigers and leopards, or the bite of serpents.=The French Society for the Propagation of Cremation, organized one year ago, has petitioned the government to sanction cremation, the cost of which will be 3 francs for each operation.=A chemist of Brooklyn recommends oil gaultheria or wintergreen, which is mainly methyl salicylate, for acute and subacute rheumatism; dose ten drops dropped on sugar and mixed with water, every two hours till relief of pain.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

SOME POINTS IN MEDICAL POLITICS:

BEING THE ANNUAL ORATION BEFORE
THE ALUMNI ASSOCIATION OF THE
UNIVERSITY OF MARYLAND,
MARCH 1, 1882.

BY ROBERTS BARTHOLOW, M. D., LL.D.,
Professor of Materia Medica and Therapeutics
in the Jefferson Medical College of
Philadelphia. (Graduate of 1852.)

The invitation to deliver the annual address before the Alumni Association found me with duties and engagements, which before all else, seemed to demand my time and attention. I felt I ought to decline any additional task, at present, but at last, considerations partly sentimental, partly dutiful, decided me to accept. No right-minded Alumnus of the University can fail to experience a lively sense of obligation to the school which gave him a professional being, and to offer his respectful homage to his teachers. For my own part, I have a vivid recollection of the able men who occupied the chairs, during

my period of pupilage, now all gone, alas! save two. I recall the central figure, N. R. Smith, then well advanced in life, but having the vigor of youth, an erect and manly figure, an eagle eye, a deft hand—the admirable surgeon, scarcely rivaled in his day. I recall Power, already sinking into his early grave, a skilful and beautiful didactic lecturer, an expert clinician, thoroughly trained in the methods of the then dominant French school. Very distinct in my memory rises the spare figure, and Voltaire-like face of Roby, whose remarkable gifts as an anatomical teacher, and varied literary acquirements, would have placed him foremost amongst the teachers of the day, if his ambition had at all equalled his merits. Not less prominent was the majestic and dignified figure of Chew, whose learning and skill although recognized in this city, never found adequate expression. Nor could one who had ever listened to his admirable obstetrical instructions, forget Thomas, who often hesitating in the lecture desk, was fluent as a preacher of righteousness. But two survive, who were then connected

with the teaching—the learned and accomplished chemist Prof. Aiken, who still happily is able to instruct successive generations of students, and Prof. Miltenberger, who then as Lecturer on Morbid Anatomy, and Demonstrator of Anatomy, gave abundant promise of the eminence which he so soon reached and has so long maintained. To the Faculty of 1850-52 I renew the assurances of my loyalty; I reverence the memory of the honored dead.

But, gentlemen, besides sentiment, our annual gatherings have other uses. The Alumni owe duties to the University—the medical school has a position to maintain before its alumni. In this reciprocity of obligations, we may find the material for thoughtful consideration.

The Alumni owe to their alma mater a loyal and generous confidence, an active interest, and a personal endeavor to improve her condition and enlarge her influence. They owe her the reflex good of their own honorable success in their chosen calling. Success is relative. To maintain a good position in the profession and in the community is to succeed, and such a degree of prosperity reflects honor on the school.

A momentous question with every young graduate is—shall I pursue a general practice, or devote myself to a specialty? The argument for specialties is a strong one. The vastness of the medical sciences and the limitation of man's faculties demand a division of labor, and special skill is developed by application to one department. Such considerations—as conclusive as the argument seems—do not decide the choice. A specialty is attractive, because of the comparative leisure which it affords, the increased consideration enjoyed, and the more liberal compensation received, as compared with the leisure, the consideration, and the compensation, vouchsafed to the general practitioner.

An immense exodus is going into the departments of special practice from the general ranks. Several evils must result. The ranks of specialists becoming too crowded, all kinds of unseemly practices will be cultivated to create and maintain a profitable *clientele*. All the world knows what these practices are, but we are strongly disinclined to admit their existence—much more, to give formal, public expression to them. But the crust of professional prejudice has been broken by Dr. Russell Reynolds; of London, in a recent notable address, uncovering the evil called by him “specialism.” Dr. Reynolds makes a careful distinction as he ought to, between the legitimate specialist and that morbid product, the practitioner of specialism. The former becomes a specialist by force of experience, adaptability, and a discriminating judgment; the latter begins by selecting his specialty, absorbs such knowledge as he thinks may be available in his pursuit from the merely commercial standpoint, and ignores everything that does not immediately contribute to present success. The true specialist recognizes the dependence of local lesions on constitutional states, the community of interests of the various parts, and the development of diseases, rather in tissues, than in separated and independent organs. The practitioner of specialism finds his pet organ the seat of all maladies, or to suffer in all, and to him, the human body is this organ supported by certain accessory parts of minor importance. What character soever, the malady may have, he contrives to bring it within his own special practice, if the remuneration is satisfactory. He exaggerates the importance of trivial maladies, and hints darkly of fearful consequences should his services have not been sought in time. He commiserates the benighted condition of general practitioners, compelled to devote mediocre powers to

all departments of medicine, but admits the eminence to which they might attain, if only they were specialists. There is, however, a darker side to specialism. These practitioners make needless visits, perform useless operations, examine poor women when it is not necessary, resort to black arts to attach female patients to them, and do other nameless acts under the guise of superior wisdom as specialists, that would if known, convulse society. Dr. Reynolds says that specialism is responsible for those abuses amongst our decorous English medical cousins. That they, also, exist amongst us is undeniable. Fortunately, the most of our specialists are worthy men of science, who carry into their daily work, an ever-present consciousness of the dignity of their art, and of the sacred nature of their relations to humanity. That we encourage the genuine specialist, and oppose to the uttermost the unhealthy development of specialism, are duties equally incumbent on us.

The medical school cannot control the ethical relations of those who receive its honors, merely to abuse them. The alumnus of to-day may, tomorrow, turn his back on the honorable traditions of the school, and assume some trade designation the more readily to achieve the kind of success at which he aims. An Alumni Association may exert a powerful moral influence to keep the graduates within the lines of legitimate practice, and confirm those in right doing who might otherwise become confused in their ethical relations. At the present time certain important principles need to be sharply defined, and firmly maintained. A movement to abandon our present position of non-intercourse with irregular practitioners, was begun in England by the addresses of Dr. Bristowe, and Mr. Hutchinson, before the British Medical Association at its last meeting, and in this country by the new code

of ethics just adopted by the New York State Medical Society. The deep indignation aroused in the medical profession of Great Britain led to a formal condemnation by the Royal College of Physicians of the proposal to recognize those who "trade under some special designation." I do not believe that the profession of the United States is prepared to follow in the lead of those who would remove all of the restrictions imposed by the code of ethics under which we have so long acted. We have in the new code, I think, the evidence of an impatience under restraint, felt by some specialists who would like fees now unavailable—another exhibition of the evils of specialism. If these eminent specialists could consult with the hosts of irregularity, how largely would they profit by the new bonanza. General practitioners, under the new regime would find their ancient foes armed with new weapons, and they themselves would be deprived of the dignified advantage now possessed in the absolute non-recognition of those who trade in dogmas and "systems." Meanwhile the specialist, an unprejudiced spectator of the conflict, would receive with impartial hands, the fees contributed by both combatants.

Is the medical profession, prepared to descend into the arena, on equal terms, with homœopaths, allopaths, eclectics, botanical doctors, and the whole catalogue of irregulars? I hope gentlemen, that the influence of the physicians composing this alumni association, will be strongly exerted against this movement.

Whilst, thus on the one hand, there is a combined effort making to break down the barriers so laboriously built up between legitimate medicine and all forms of irregular practice—on the other hand there is manifested a purpose to organize the profession into a "trades union." As the plumbers and moulders, seek to restrict the production of workmen by regulating the

number of apprentices, so it is attempted to limit the number of doctors, by artificial regulations. To admit irregulars to terms of equality by meeting them in consultation, is born of the same purpose as the limitation of professional growth by restrictive laws. But one regulation—the law of supply and demand—will properly control the professional expansion. Under this system medicine has in this country, made enormous strides. Had it been “fostered,” so-called, by our untrained rulers, can any one believe that it had attained to the remarkable development of to day? Those who are clamorous for laws to control our institutions, are hardly conscious of the evils of political management. When state boards of examination and of health, hospital appointments, etc., are made by the political parties the single qualification for a position will be political influence, as we all full well know.

In Germany, France and England the government may be entrusted with the management of medical institutions, for the civil administration is stable, and carefully drawn laws are enforced with precision. Even in England they begin to question the wisdom of their system. They ask whether, if left to its own development, unhampered by coercive laws, the medical profession had not reached a higher position. If, under the most favorable circumstances, regulation of medical affairs by the secular power may be of questionable utility, is it not certain that, under our political system, the most serious mal-administration would be the result? Rather let us submit to some abuses than fall into more serious ones by the vain attempt to improve our condition by legal enactments. Whilst, as a general rule, it were far better to avoid the politicians than to attempt to improve our organizations by their aid, there may be some useful legislation. The State should be provided with a

properly constituted Health Board, to have charge of all matters relating to public health, including adulterations of food and medicine. A State Board of Examiners, properly constructed, to determine the qualifications of all men intending to practice within the limits of the State, is an obvious requirement, in the interests alike of the public and the profession. The proper powers of such a board are, however, with difficulty defined. The conception of the average legislator is most crude. A bill to create a board having the powers usually assigned to a health board, and also to an examining board, was brought before the Legislature of Pennsylvania last year, and passed the lower house. This bill authorized the Governor to appoint the Board, but did not define the qualifications necessary for the office, and gave to the board power not only to examine those who had been educated as physicians, but to confer the right to practice on any one! A political board, if this bill had become a law, could have refused the right to practice to their political opponents, and have filled the State with doctors of their own choosing. Such is a sample of the legislation we may expect when our professional matters become the subject.

Nothing could be more senseless than the outcry against the colleges in regard to the multiplication of M. D's. The colleges do not put the purpose to study medicine into men's minds, and, as each student is required to have a preceptor, the initial step is made by the physician who takes a student. By those who desire to limit the number of physicians is it proposed to abandon the field to irregular practitioners? If the number of regularly educated medical men is materially reduced, there must be a corresponding increase of pretenders. Those who wish to engage in the study and practice of medicine will find the opportunity to do so, and, if

they are refused admission to the regular medical schools—if they are denied the opportunity to obtain a proper medical training, they will enter some diploma shop, and secure such training as its meagre resources afford. We should rather rejoice, then, to see the benches of our *alma mater* crowded. We may feel assured that every young graduate will displace some less competent man, or will set up a lively competition, that will put each opponent on his mettle. If medicine ceases to be a desirable pursuit as compared with other careers, men will cease to engage in it, and thus the law of supply and demand, left to its unhampered operation, will regulate our growth.

A national medical society has been organized, admission to which is based, not on medical learning or skill, but on a college training. To have received the title of A. B. in course is the distinction for which the honors of this society are reserved. There can be no doubt that most of the gentlemen whose names we find enrolled are able and distinguished, but the distinction to which any one has attained is due to some medical and professional rather than literary work. One could readily select from the physicians of the United States the same number of equally eminent men who have had no collegiate, not even a classical education. There is no point in medical affairs the importance of which is so exaggerated as the *cultus* required for the study and practice of medicine. That the possession of an A. B. title or of the training that this title implies is an indispensable preliminary is simply a delusion. An extended literary and classical course rather unfits a student for the acquisition and practice of medicine as an art, how much soever it may facilitate his progress in the science. The men of most distinction at the present achieved success by the exercise of other than the literary

faculty, and the men who will hereafter occupy the foremost places will not owe them to a collegiate training. One of the most celebrated of the medical men of this country, an author and a successful teacher, was a tailor on the bench at twenty-one. Another physician who has attained to eminence in his profession and has become an accomplished linguist, reading most of the modern languages with ease, was able to do little more than read and write when he began his medical studies. I might thus recount numerous examples of which I have personal knowledge illustrating the great intellectual development achieved by men who, at the beginning of their career, had merely the rudiments of an education. The examples are too numerous to be exceptional. They occur with almost the unfailing regularity of law. With such facts before me, I confess I do not sympathize with those who would advance medical education by preventing those engaging in the study who have not had a scholastic training. From my point of view, it would be doing a grievous wrong to exclude from the profession men capable of successful study. Much is said now of the duty of the colleges to enforce a preliminary examination. The time for the exercise of a just severity is at the examination for the doctorate. The medical college owes to the profession the duty of a rigid ascertainment of the candidate's fitness, medical, moral and intellectual. Let every man who has the barest pretence of a claim to engage in medical study have the opportunity to demonstrate his powers. If he fail to prove his right to become a physician by a sufficient course of successful study, no merciful considerations should prevent the exercise of an inexorable justice.

Improvement in medical teaching, enlargement of the college curriculum and a higher standard for the

doctorate have furnished the material for numerous reports, essays and speeches. On all sides the low condition of our medical teaching is deplored, and the standard of our medical schools is unfavorably contrasted with European models. Much of this discussion is a wild declamation, more concerned for the effect it produces than for an exact statement of the facts. Our medical schools must be considered in relation to the state of American society, to the degree of general cultivation to which the people have attained, and to the condition of the medical profession.

In a new country, constructing society from the rudest elements, only the simplest attainments are possible. An uncouth and ignorant people would not appreciate—would not, indeed, understand a polished physician full of the culture of the schools. Prof. Charcot and Sir William Jenner, equipped with all the resources of scientific medicine, would fail to please the people of Egypt in Southern Illinois, when a botanical physician with lobelia and No. 6 would excite their enthusiastic admiration. The medical school must reflect the professional status, and the physician, necessarily, is an exponent of the society in which he exercises his art. Judged by these standards, our medical colleges, are not less but more advanced, than the educational institutions about them. It must be admitted, I think, that they are rather numerous. The practice of specialism exerts its baleful influence in this direction. The natural history of medical colleges is a curious phase of the medical profession. As in most states there is a general provision in the constitution, or a general law, under which corporations may be formed, medical colleges are organized with great facility, and no limit can be placed on their number except that imposed by the needs and means of prospective incorporators. They would be still more numerous if the

luxury of founding and administering them were not an expensive one. When a town has reached a certain amplitude and begins to assume metropolitan methods, a medical college, amongst other elegant necessities, is projected. A building, often a deserted warehouse, is obtained, a few skeletons, an electrical machine and some chemicals are purchased, and the business of conducting a medical college is commenced. In the circular communicating to an expectant world the opening of the medical school, the metropolitan proportions of the city, its geographical position, the peculiar maladies of the region of which it is the centre and the distinguished merit of the gentlemen composing the faculty are urged as the motives for founding another medical college. In the discussions and conferences amongst the principal physicians for deciding on the chairs to be occupied respectively, there is expended a vast amount of difficult negotiation. The adjustment of the claims of the several aspirants is most delicate, and when at last effected with infinite pains, the relations of the parties are so strained that any moment a violent rupture may occur. Usually, indeed, several explosions take place before any permanent arrangement can be effected, for some of the new professors are not satisfied that justice has been done by an adequate recognition of their respective claims.

In establishing a new school, the first in a considerable city, it is not possible to provide for all the aspirants, notwithstanding all the specialties are recognized. The gentlemen omitted, friends, associates and neighbors of those selected, cannot understand the reasons which induced the rejection of their claims; for they have claims, and very strong ones, for recognition. The result is they decide on the organization of another school of medicine in which the

remaining medical talent of the city will have suitable provision. This process of "recognizing claims" may go on to the formation of a third, even a fourth, medical school. They are no sooner organized than they begin a violent opposition, medical students are canvassed for, as infant foods are sold by commercial travellers. A medical journal in the interest of the first college is established, and sometimes, indeed, the journal is founded first, to prepare the way and to set forth the reasons for the organization of the medical school. If one journal appears, another must be established. The hospital—if there be one—then becomes an object of fierce contention. The warfare is carried into the newspapers, and the community is divided into two parties, for the old and the new college respectively. The combat thickens; the opposing professors glare at each other when they pass in the streets; the two journals bandy the fiercest epithets, and both parties are guilty, according to their own statements, of all sorts of knavery or are immersed in a besotted foolishness. It is exhausting, both morally and from the pecuniary standpoint. The students are not numerous, the fees are low, and, in the bidding, astute students contrive to oppose the offer of one against the reduced price of the other, until the fee exists only in name. The schools thus struggle on in abject poverty, and the professors enjoy the distinction of laboring without compensation and paying the expenses from other resources. Presently a friend of both parties, and, therefore, usually a layman, represents the folly of the contention, and of the existence of two schools, and proposes a consolidation. The exhausted combatants listen gratefully, and are rejoiced to effect a compromise and join their forces. To adjust the "claims" of each member of both faculties requires the utmost tact, but, not-

withstanding the solicitations "for the good of the profession" and "for harmony," mortal enemies are made by the exclusion of some whose claims are not strong enough to retain them in the new combination. When the arrangement is at last effected it is curious to observe the change in the behavior of the late opponents. They may now be seen in cordial consultation, smiling on each other benevolently, riding together, on college business bent, whilst the unhappy ones omitted from the "reorganization" look on with a gloomy resentment. The new combination is announced with a flourish of trumpets. It is now said that, whilst "one good school" may have a vigorous existence, two cannot survive in such a city; that the new faculty is an especially strong one, since it contains the best elements of both, and that the "profession" will view with favor this combination of talents in the interests of harmony and the "higher education." There are mutual congratulations and pleasing anticipations, and a brilliant future is predicted. The new faculty is full of zeal, the students enthusiastic, and thus, indulging themselves in much mutual admiration, a session or two is carried on successfully. But it is not long before the mutterings of discontent are heard. The old associates, who were excluded, lose no time in sowing the seeds of jealousy and discord. Some of the faculty feel themselves overshadowed and long for a revival of the old organization, where their importance was duly recognized. In what way soever it is finally determined, the outburst sooner or later comes. The union was not hearty, and the motives for a rupture need not be strong. The concussion produced by the sudden rending of the faculty is terrific; the elements are completely disassociated, to be united again under the former combinations—the old attractions re-

asserting their power. The former strife is renewed, with ten-fold power. Cards, personal explanations, pamphlets, charges, criminations and re-criminations fill the columns of the medical journals and overflow into the columns of the newspapers.

Many of the new colleges which have sprung up so abundantly over the country have really no right to exist. They are unprovided with the materials for teaching, and the fees are insufficient to procure them; they have no hospitals or dispensaries to which they can resort for clinical instruction; the faculties are without reputation or experience; the building in which the college has its habitat is some temporary structure, little suited to the purpose. The lectures are mere recitals of text books, which the student could better read for himself. Of course the great majority of medical students see a medical school for the first time when they enter one of these institutions, and may therefore be excused if they find in the one they attend the perfection of human wisdom applied to medical college-making.

These medical schools get into such desperate pecuniary straits that they must employ every possible expedient to obtain students. One hears of personal solicitations, of abject entreaties, of promises, of sending out drummers to intercept students on the trains and at hotels, of practices, in short, which seem to touch at the lowest point of degradation. The "advantages" of these institutions, beside their proximity to the homes of students, are the low fees, or no fees at all, how high soever the nominal price, and the certainty that a diploma may be obtained on a minimum of attendance on lectures. Such institutions are, indeed, little more than "diploma mills." These medical shops hurt our position before the public immensely. They unite with the reputable medical schools to form

a national association of medical colleges; after a time they put on a severely virtuous air, and are disposed to snub newer colleges, organizing in their vicinity, stigmatizing them as unnecessary, crude and inferior. Having thus acquired a quasi-position, and assuming a tone of lofty pretension, they carry on a traffic in medical diplomas, the profits of which enable them to maintain a baleful existence. The most beneficent reform which can now be undertaken is to close the doors of these institutions engaged in flooding the country with unqualified doctors. As I have before asserted, I do not believe it wise to so restrict the facilities for obtaining a medical education that intending medical students will be driven into the ranks of quackery. The formation of medical schools in cities having sufficient hospitals for clinical instruction ought not to be discouraged, in my judgment, but suitable legislation should require a medical school to be properly equipped in all the appliances for instruction before the power to confer degrees is granted. As the proper conduct of a medical school is expensive, the fees ought to be sufficient to afford the professors a suitable remuneration or an adequate endowment provided. If the college is properly equipped, if it can give the necessary clinical instruction, if its professors are competent, it has demonstrated its right to exist; but its recognition by the medical profession should be contingent on the needs of the locality in which it is placed. The number of completely-organized and thoroughly-equipped medical schools cannot, as I conceive, be too great for any considerable time, since, when the supply exceeds the demand, a reduction takes place correspondingly. In the struggle for existence the fittest of the medical colleges will survive.

OBSERVATIONS ON THE TREATMENT OF SOME FORMS OF PULMONARY DISEASE AT MONT DORE, FRANCE.*

BY RICHARD H. THOMAS, M. D.,
OF BALTIMORE,

Attending Physician to the House of Refuge.
(Read before the Clinical Society of Maryland, Feb. 17th, 1882).

Although the practice of sending phthical or any other kind of patients to a French health resort can have at best but a limited application to Baltimore, I still venture to hope that the remarks I shall make to night may possess a certain amount of interest though I succeed in nothing more than in emphasizing facts already familiar.

Mont Dore, a village in the Auvergne mountains, in the Department of the Puy-de-Dôme and nearly in the centre of France, is not a thing of yesterday. The remains of extensive baths, which have been found, and are now piled up in disorder at the end of the little park of which the town boasts, as well as coins of Vespasian, Trajan, Antoninus and Marcus Aurelius abundantly testify that this was a health resort of considerable prominence, probably at an earlier date than these reigns (Alvin). It was but natural in the commotions which prevailed when the empire fell that the obscurely situated and hardly accessible springs should be forgotten; nor was their importance again recognized till about the commencement of this century, when Michael Bertrand, a distinguished physician, succeeded once more in bringing them into no-

tice. Since that time their reputation has been growing until now it is established not only on the continent but English physicians also are sending their patients, suffering with ordinary phthisis, asthma, chronic pleurisy, empyema, chronic bronchitis, laryngitis, pharyngitis, etc., to spend a season of three weeks in the summer at Mont Dore. Hitherto, the difficulty of access has been an obstacle to the growth of this resort; but, by the coming season, it is expected that the railroad which is now six miles off, will run the whole distance, and then passengers can travel without change from Paris in eleven hours.

The village lies in a valley formed by the crater of an extinct volcano and is thus almost surrounded on all sides by rather precipitous mountains. In fact, from Mont Dore itself the valley appears to be quite shut in, for at the northern end it turns at right angles to the west thus allowing an escape to the little river of the Doredogne, which flows through it. This valley has an elevation of 4,200 ft. above the sea and is $3\frac{3}{4}$ miles long and $1\frac{1}{4}$ miles broad at its broadest part, though narrower at the village. At its southern end it is completely enclosed. Two streams enter it here in cascades which uniting in the valley, form the river above mentioned.

The little town of Mont Dore is situated at the centre of this valley. The houses cluster round the Thermal establishment which is built on the *Place Thermal*, the public square, from which streets, mostly narrow and not overly clean, run out in various directions. The Thermal establishment itself consists of two buildings, the *Grand Etablissement des Bains*, which is built over the springs and just at the foot of Puy de L'Agle where they break out and where the baths are taken, and the *Etablissement des Vapeurs*. The hot springs of

*Besides personal observations in which I was much assisted by Dr. Emile Emond, at Mont Dore, I am much indebted to his valuable little book (in English) "Mont Dore (Auvergne) and its Mineral Waters," London; Wyman & Sons, Great Queen Street, W. C., 1878; also, to "Le Mont Dore, par Le Dr. J. Alvin Lyon, 1874. See also article by Dr. Burney Yeo, *Practitioner*, (London) July, 1881.

which there are nine throw out 460,-080 qts. daily. The temperature of the water varies from 109°F. in the Source Raymond and most of the others to 113° F. in the Source Madeleine (the largest) and the so-called Bains de Cæsar.

An analysis of these was made in 1862 by M. Lefort at the instance of the *Societe Medicale* of Paris. He found that the waters had a weak mineralization and contained among other things, free carbonic acid, iron, iodide and fluoride of sodium, bicarbonates of lime, soda, magnesia, but, most important of all, though in very small quantity, arsenic in the form of the arseniate of soda.

The methods employed in the treatment of the invalids who resort to Mont Dore are very varied. Thus they have the general hot bath, the bath with douche, the temperate bath, the foot or hand bath—the half bath—douches in the form of a general shower or in a single jet—douches for the nose, for the vagina, also the ascending douche. The water is

The following table from Dr. Alvin's book gives the analysis of the water of the Madeleine and Raymond Springs, which are used in drinking. The analysis of the others does not essentially differ. The quantities given represent the amount contained in a litre of the water.

	MADELEINE.		RAYMOND.	
Oxygen	cc.	0.65	cc.	0.73
Azote		8.64		10.00
Free carbonic acid	gr.	0.3522	gr.	0.4997
Bicarbonate of soda		0.5362		0.5362
“ of potassa		0.0309		0.0212
“ of oxd. rubidium	} Indica-	tions.	} Indica-	tions.
“ of oxide of cæs'm				
“ of lithia		Traces		Traces
“ of lime		0.3423		0.2720
“ of magnesia		0.1757		0.1647
“ of protoxide of iron		0.0207		0.0317
“ of manganese		Traces		Traces
Chloride of sodium		0.3685		0.3578
Sulphate of soda		0.0761		0.0737
Arseniate of soda		0.00096		0.00096
Biborate of soda				
Iodide & fluoride of sodium	} Traces		} Traces	
Silicic acid		0.1654		0.1550
Aluminium		0.0112		0.0065
Organic & bituminous subs.		Traces		Traces
		2.08016		2.11946

used for drinking; and, for the throat—in gargling, or in a fine spray at a temperature of 97°F. The great specialty of Mont Dore, however, is the vaporized water. Dr. Michael Bertrind observed that his asthmatic patients derived great benefit from the steam arising from the water during the bath. (Emond) This induced him to have the *Salles d'aspiration* built where they could have the benefit of this without the baths which have proved not unfrequently harmful to this class of patients. (Burney Yeo). The result more than equalled his anticipations. There are four large rooms (two for men and two for women). In the warmer ones the temperature of the vapour is 89°F; in the cooler, where the pulverized water is also administered, it is 80°F. On analysis this vapour has been found to contain all the mineral elements of the water and so is specially helpful not only as vapour but as applying these medicinal properties to a large extent of absorbing surface. The vapour is also used as a douche which can be directed to any part of the body. These are administered in very small rooms which therefore are instantly filled with vapour.

Last summer it was my good fortune to spend a number of weeks at Mont Dore in company with an invalid who had been advised to go thither by Dr. Wilson Fox of London, and thus I had the opportunity of personal observation of the effects of the treatment. The history of the case is as follows: The patient, a lady between fifty and sixty years of age, had had severe winter cough since 1872 which had grown worse every winter, till in May of the present year she had been attacked with a rather severe hæmorrhage, which had greatly prostrated her. There was much weakness with frequent sweatings; cough, only allayed by the constant employment of morphia; and almost

entire loss of appetite. The physical signs were dullness at the apex of the right lung, bronchial breathing and prolonged expiration with moist rales. As soon as she was at all able to travel we proceeded to Mont Dore by as easy stages as possible. On the journey there was some little bloody expectoration. A few days after arrival, treatment was begun under the advice of Dr. E. Emond.

Taking this patient as a sample of the course adopted in these cases, the following would be the history of a day at Mont Dore. About seven o'clock A. M., or earlier, porters came with a Sedan-chair, well closed on all sides, into which the patient, clad in a loose woolen suit specially adapted for the purpose and further protected with shawls, &c., steps, to be carried to the establishment where the first order of proceedings is to drink a half glass of water from the Madeleine spring; then to be carried up stairs to the "Baths of the Pavillion," where, clothed in a flowing linen wrapper, the patient takes a half bath at a temperature of 107° F. to 111° F. lasting from five to ten minutes. This is the favorite time for a visit from the attending physician. The bath over, attendants are in waiting with warm towels and, as soon as he is well wrapped up, he is carried down stairs for another drink at the fountain.* Then, still in the sedan, he is taken across the street to the "*Etablissement des Vapeurs*" where, divested of his extra clothes, he spends from twenty minutes to an hour in the vapour bath. Then, once more well wrapped up he is carried for another drink to the fountain and then back to the hotel; on the steps of which stands the *femme de chambre* not "forgetting about the warming pan" but ready, as

soon as she knows who is approaching, to carry that useful article up to his bed room. By the time he reaches the room the bed is nicely warmed and into it he gets without undressing and cools down for half an hour, after which, for until now he has eaten nothing, he is allowed to break his fast. In the afternoon he walks to the "*Etablissement*" once more and awaits his turn for a six minutes foot bath of a temperature of 107°-111° F.; this is to prevent the headaches, &c., which the morning experience sometimes occasions. Rather heroic treatment! Yes, but under it our invalid's health and strength improved, her appetite became natural, there were no sweatings except the ones occasioned by the treatment, the cough almost entirely disappeared, there was no further hæmoptysis and the expectoration ceased. At first, the mucous rales increased and were heard over the greater part of the chest—but afterwards they diminished and the area of dullness over the right apex lessened, also the bronchial breathing. Owing to some imprudence, she caught a cold during this time but that did not materially alter the result of the treatment.

In regard to phthisis in the young subject, Drs. Emond and Alvin record in their books interesting and remarkable cases of patients who, though rapidly running down from chronic pneumonic and tubercular trouble at the apices of the lungs, were either greatly benefitted or completely restored through the Mont Dore treatment, the change for the better dating from their arrival there. In chronic bronchitis this method succeeds admirably, as also in chronic pleurisy and empyema. In these latter cases the vapour douche and the water douche are generally superadded to the other treatment so as to produce greater local effect. In cases of asthma, the general baths

*In the case of the invalid above mentioned it was found best to order these half baths only every other day.

do not agree so well, but the vapour, in connection with them or without them, exercises a most beneficent influence.* In chronic pharyngitis and laryngitis the pulverized water and the gargles are very effective, and in his last book Morell Mackenzie recommends sending patients disposed to catarrhal laryngitis to Mont Dore especially if they be adults, as a prophylactic measure; and recommend it also in the treatment of granular pharyngitis. (Diseases of the Throat and Nose, London 1880, vol. 1, p. 38, p. 272.)

The treatment lasts fifteen to twenty days and is then stopped. It is not generally recommended to go through more than one of such "seasons" as they call it in a year. The system becomes saturated after it has been continued for this time and it is unsafe to keep on with it. Saturation is shown in disgust for the waters, headache, diarrhoea, even loss of memory. As, however, the treatment closes at the end of the three weeks as a matter of course, these symptoms are often not at all noticed and they disappear on the discontinuance of the water. When the weather is warm the treatment is not borne so well and must at times, be suspended.

In considering the *rationale* of the Mont Dore treatment, we must bear in mind the peculiar conditions under which it is administered. In talking with Dr. Emond, I asked him if he was much in the habit of using Mont Dore water in his winter practice in Paris. He said "no, except for those who had spent the previous summer at Mont Dore" These he orders to drink the water in warm milk before breakfast in November and again in January. But, otherwise, he had not found much result from the local or general use of the water in Paris. This would be far more true in respect to the use of the

vapour. Should we attempt to treat our cases of incipient phthisis, or asthma by such a process of prolonged steaming as that above described, even with the same mineral water, the probabilities are that we should not have the same satisfactory results. Ordinarily, in phthisis, it is best to use simply the vapour of volatilizable substances as creasote, oil of eucalyptus, carbolic acid, &c.,* and to dispense with warm inhalations. But at Mont Dore it is different. In the first place, we have an elevation (4,200 feet) above the sea and the consequent low pressure of the barometer which averages only 26.6. Again, although there are frequent fogs, especially in the morning, there is but little constant moisture in the air. Dr. Burney Yeo gives the relative amount as compared with that of Paris as 9.34 to 15.46 and proceeds to say: "These processes are carried out in a bracing air, in an atmosphere freer from permanent moisture than on the sea level. It is now a well known fact that exposure to this kind of mountain air has the effect of greatly reducing that impressionability to cold which is so common in scrofulous subjects, and which is at the root of these catarrhal tendencies, while it is especially tonic to hyperæsthetic states of the nervous system. A climate like that of Mont Dore tends to diminish cutaneous and respiratory sensitiveness and is therefore admirably suited for the application of the processes there in use for the cure of asthmatic and catarrhal affections." The same authority considers that better results are obtained in spasmodic and catarrhal asthma "than by any other plan of treatment hitherto available."

The physiological effects of a course of treatment at Mont Dore will be readily understood. There

*See Dr. Burney Yeo's article on this subject, "*Practitioner*," July 1881.

*See "several interesting articles in the current number of "*Baithwaite's Retrospect*" on the treatment of phthisis by inhalations.

is great increase in the activity of the skin and thus a great relief is experienced by the lungs and kidneys. The loss sustained in this way is made up by repeated draughts of the hot mineral water and thus there is an active stimulation of retrograde tissue changes (Yeo), and an increased elimination of irritating substances. But the arsenical and other salts in the water have a directly tonic effect on the system though taken necessarily in infinitesimal doses. This, however, according to modern authorities, is rather a point in their favour. Besides this, there have been discovered electrical properties in the water. The free carbonic acid has a direct stimulating effect for though so much is gone through with in the way of treatment before breakfast there is no sense of the exhaustion so frequently felt when there is a long time intervening between arising and breakfast. This point I have myself tested.

In addition to these influences there are minor ones which are nevertheless potent. The mountains around are clothed to a great extent with pine forests, so that, in most of the favorite excursions, the invalid can breath in their healthful exhalations. Mont Dore is also a very quiet place and presents but little to call one away from a regular round of treatment and afternoon drives, rides or walks. These are of sufficiently varied interest, however, to keep the invalid from finding the time hang heavy on his hands during the three weeks stay.

There is one class of cases that should never be sent to Mont Dore to be treated and for very obvious reasons. I refer to those where there is any valvular disease of the heart. I met with an example of this last summer. A young man with slight mitral insufficiency was induced to try a very mild course of treatment at Mont Dore. He did so for four days,

at the end of which time he had become so weakened and his circulation so disordered that he was almost obliged to keep his bed. His heart which, under ordinary circumstances, was quite able to perform its proper functions, was very much embarrassed when the smaller arteries became so relaxed as they do during a course of this treatment. The unpleasant symptoms soon disappeared after he left off the treatment. In all cases however it is important to act under the advice and superintendence of one of the physicians of the place.

The season at Mont Dore is from the 1st of June to the 1st of September. As in all places of such elevation the weather is subject to rather sudden changes, the barometer and thermometer often rising and falling suddenly. Generally the air becomes cool as soon as the sun has set so that it is not safe for invalids to remain out of doors afterwards.

The highest recorded temperature in July and August is 80°F. the lowest 40°F. In June and September the weather is much more changeable. These changes, inseparable from such an altitude, do not militate against the effect of the treatment if due caution is observed;—thus flannel or woolen undergarments should be worn and, in choosing a room, one with a fire place should be selected.

One inconvenience about Mont Dore is that for a radical cure in any of the diseases mentioned except perhaps laryngitis and pharyngitis, it is necessary to go there two or three years in succession, but decided benefit is experienced in one season. The advantages of the Mont Dore treatment in phthisis consist in the climate, the special alterative and tonic effect of the water in which a prominent part must be ascribed to arsenic and to the vapour into which the patient is plunged daily which has a soothing styptic effect upon the lungs and helps

the absorption of consolidations. And then it is not only that the vapor is breathed but the whole surface of the body is, at the same time, exposed to it and thus a general as well as a local action is established.

There is one feature about the invalids at Mont Dore, which was in striking contrast to some other health resorts I have visited; for here almost every one seemed to be improving, and there was none of the depressing effect which the acknowledged hopelessness of a disease gives to a number of persons collected together who are suffering from it.

In conclusion I would point out that, for a foreign health resort, Mont Dore is peculiarly suited to Americans as they could spend three weeks of a tour in Europe at Mont Dore without going much out of the way, as it is almost on the main route from Paris to the Mediterranean.

CORRESPONDENCE.

1736 I Street, N. W.,
Washington, D. C., 17th Feb., 1882.
Messrs. Editors:

In your issue of 15th instant, you publish an article by Dr. Richard H. Thomas, commenting on the Report of the Committee of the American Public Health Association on Prevention of Venereal Disease and the wider proposition of Dr. Morris of that committee. In the course of his article Dr. Thomas refers to the testimony of Dr. J. Birkbeck Nevins, of Liverpool—President of the Society for the Prevention of Licensed Prostitution, before the Select Committee by Parliament as to the inefficiency of the Contagious Diseases Acts of Great Britain. It is evident that Dr. Thomas had not read very carefully Dr. Nevins' replies to Mr. Cavendish Bentinck and Mr. Osborne Morgan, members of the committee. The Attorney-General elicited from Dr. Nevins, who has been prominent among medical men

in his hostility to these acts, that he had *no personal* knowledge of the measures he was combatting. On the other hand, the Reverend Prebendary, Dr. Wilkinson, Vicar of St. Andrews' at Plymouth; the Rev. Mr. Duffield, of Woolwich; the Rev. Dr. Grant, Vicar of Portsmouth, and the Rev. Father Reed of the Catholic Church, all testified from personal knowledge, being residents at the places where the acts are enforced, of their beneficial effects, while Inspector-General Lawson of the British Army confronted Dr. Nevins' statements with contradictions based upon official statistics. I inclose a no less emphatic contradiction from the official returns of the British Navy, which appeared in *The Sanitarian* for November, 1881, but which in view of the importance of the subject and of the possible effect of Dr. Nevins' special pleading and ingenious presentation of the facts out of place may deserve to be reproduced, in this connection in your JOURNAL.

Very truly yours,
ALBERT L. GIHON, M. D.
Medical Director, U. S. Navy.

FROM "THE SANITARIAN," NOV. 1881. THE CONTAGIOUS DISEASES ACTS OF GREAT BRITAIN.

BY ALBERT L. GIHON, M. D.,
Medical Director U. S. Navy, Chairman of
Section on State Medicine, American
Medical Association.

The beneficial effects of the Contagious Diseases Acts of Great Britain, in restricting the spread of venereal disease, limited as is their operation, is conclusively demonstrated by the extracts given below from the *Statistical Report of Health of the Navy for the year 1879*, presented to the Right Honorable The Lords Commissioners of the Admiralty by the Director-General of the Medical Department of the British Navy, John W. Reid, M. D., and ordered, August 24, 1880, by the House of Commons, to be printed. The compilation is the work of Dr. J. N. Dick, R. N., Deputy Inspector-General of Hospitals and Fleets,

and its numerical facts are indisputable, and complete refutation of the misstatements by certain societies and individuals, which are protesting against the police control and sanitary supervision of public prostitutes, on the pretexts, first, that these are infringements of their civil and political rights as members of society ; second, that they are indignities to them as women ; and third, that the only effect of such regulations has been to actually increase the amount of venereal disease at the places where they have been attempted.

Returns showing the Number of Cases of Venereal Diseases, in Her Majesty's Ships and Vessels, stationed at five Home Ports, at which the Contagious Diseases Acts have been and are in operation ; and the Number of Cases in Her Majesty's Ships and Vessels, at which the Contagious Diseases Acts have never been applied, from the year 1860 to the year 1879, inclusive ; together with the Ratios per Thousand of Force for the Ports under the Acts and the Ports not under the Acts.

PORTS UNDER THE ACTS.

PERIOD.	Average Annual Complement Corrected for Time.	Average Annual Number of Cases of Syphilis.			Ratios Per 1,000 of Force.			Average Annual Number of Cases of Gonorrhoea.	Ratio per 1,000 of Force.
		Primary.	Secondary	Total.	Primary.	Secondary	Total.		
No acts in force..... 1860-63.	9,050			679			75.02	240	26.52
Act of 1864 in force..... 1864-65.	10,010			792			79.12	224	22.37
Acts of 1866 and '69 in force, 1866-70.	10,340	359	129	488	34.72	12.47	47.19	292	28.23
Acts of 1865 and '69 in force, 1871-79.	11,080	319	123	442	28.79	11.10	39.89	696	62.81

PORTS NOT UNDER THE ACTS.

PERIOD.	Average Annual Complement Corrected for Time.	Average Annual Number of Cases of Syphilis.			Ratios per 1,000 of Force.			Average Annual Number of Cases of Gonorrhoea.	Ratio per 1,000 of Force.
		Primary.	Secondary	Total.	Primary.	Secondary	Total.		
No Acts in force. 1860-63	1,670			117			70.05	49	29.34
1864-65	1,540			154			100.	40	25.97
1866-70	1,640	97	42	139	59.14	25.6	84.74	60	36.58
1871-79	1,605	116	35	151	72.27	21.8	94.08	80	49.84

RATIO OF SYPHILIS CONTRASTED.

PERIOD.	PORTS UNDER THE ACTS.			PORTS NOT UNDER THE ACTS		
	Primary.	Secondary.	Total.	Primary.	Secondary.	Total.
No Acts in force.....1860-63			75.02			70.05
Act of 1864 in force.....1864-65			79.12			100.
Acts of 1866 and 1869, in force.....1866-70	34.72	12.47	47.19	59.14	25.6	84.74
“ “1871-79	28.79	11.10	39.89	72.27	21.8	94.08

The contrast is all the more remarkable, since during the period when no Acts were in force anywhere, the particular ports now under the Acts, Dartmouth, Plymouth, Portsmouth, Queens-town (Cork) and Southampton, actually exhibited a greater ratio of syphilitic disease, *i. e.*, 75.02 per thousand, than those which have been selected for comparison as never having been under the Acts, Greenock, Hull, Kingstown (Dublin), Leith and Liverpool, where the proportion was only 70.05 per thousand. Furthermore, while the cases of syphilis have been drawn from complements of only 1,600 men at the ports not under the Acts, the number of individuals furnishing the cases at the ports under the operation of the Acts, have been over 10,000. Yet, during the nine years intervening between 1870 and 1879, while 94.08 per thousand of the smaller number of men at unprotected ports contracted syphilis, only 39.89 in every thousand of the seven times greater force, comprising precisely the same class of persons, living under the same conditions, at ports enjoying the partial protection of the Contagious Diseases Acts, came upon the sick list from this cause; and in this connection, it must be borne in mind that "since the passing of the Acts, the attention of the medical officers has been more closely directed to the registration of venereal diseases, and a large number of cases have been entered on the sick list and recorded, and now appear in the returns, which would not

have been shown formerly." Consequently, great as the degree of improvement exhibited, the figures really fall short of showing all the good which has actually been accomplished. Inspector-General Dick states: "With reference to the increase of gonorrhœa shown in the above summary, it is necessary to note the fact that previous to the time of the passing of the Contagious Diseases Acts, it was not the practice of the Navy to place cases of gonorrhœa, unless severe ones, upon the sick list; thus the majority of cases were not recorded," but, notwithstanding this omission, the respective ratios are only as 62 81, where every form of lesion, however mild, is recognized and registered, against 49.84 where only the severest cases come within the cognizance of the medical officers and appear in the official returns.

The total amount of venereal disease throughout the British Navy during the year 1879 appears from the recent annual report of the Director-General to have been 140.19 per thousand of strength—of syphilis alone 57.76. Among every thousand men in the service, forty five were daily rendered unfit for duty by reason of sickness, and of these ELEVEN, *one-fourth of all the sick*, were disabled by venereal diseases. In the face of these facts, what unprejudiced thinker, having an earnest regard for the efficiency and economy of the public service and a sincere interest in the physical and moral welfare of the great body of men, who are the nation's charges, can

dispute the wisdom of the attempt the British Government has made to prevent the spread of these diseases by the enactment of the Contagious Diseases Acts!

SOCIETY REPORTS.

BALTIMORE ACADEMY OF MEDICINE.

STATED MEETING HELD DEC. 6TH, 1882.

S. C. CHEW, M. D., President, in the Chair.

(Specially Reported for the Maryland Medical Journal).

* * * * *

USE AND ABUSE OF QUININE.—

Dr. McSherry reported the case of a man who entered the University Hospital with sight and hearing both seriously impaired from the excessive use of quinine. The quantity taken by him was not known. Notwithstanding this extreme cinchonism an intermittent fever from which he had suffered remained uncured. *Dr. McSherry* then spoke of the abuse of quinine. He had often seen deafness due to it; he had also frequently seen gastric and cerebral distress persist until it was discontinued. It should be given to counteract the malarial attack; when this ceases if it be continued, it may do more harm than good. It would then pervert the blood as well as nearly every viscus in the body. It was the subject of a great deal of maladministration. In animals convulsions had been produced by it. Iodine has lately been used as a substitute for it in some cases at the University Dispensary by *Dr. Morison* with great success.

Dr. Owings (Ellicott City) had lived for thirty years in a malarial district and had consequently used quinine very freely. His habit is to suspend it after 2 or 3 days use and give something else. A student of his took 40 grains every 4 hours, until he had taken $\frac{3}{4}$ ss, without ill effects. The accuracy of this amount was confirmed by the druggist, who had put up each dose at the time it was taken. On another occasion a negro man took 90 grains of quinine at one dose, without bad effects except headache.

Dr. Morris had used tinct. of iodine and Fowler's solution of arsenic as substitutes with excellent results.

Dr. McKew had never in his 30 years experience seen any ill effects from the use of quinine.

HEPATIC ABSCESS.—*Dr. McSherry* reported the following case: A man was brought into the University Hospital with an illness of 7 weeks duration. He had had chills and fever, was debilitated and had an enormous tumor or swelling in the epigastrium. It was thought that he probably had an amyloid degeneration of the liver. Nitro-muriatic acid internally and locally by baths was ordered. He also had anorexia with some diarrhœa and was much dejected in spirits. An examination by *Dr. McSherry* revealed some fluctuation in the site of the swelling, and it was evident that he had either a hydatid cyst or an hepatic abscess. The diagnosis of the latter was established by the use of the hypodermic syringe. The aspirator was then used and 85 ounces of pus removed. A compress was then applied with a bandage above and one below and Dover's powder nightly, the object being to bring the sides of the abscess together and secure as complete physiological rest as possible. The patient did well until the 8th day when the temperature began to rise and sulph. cinchonidia, gr. x three times a day was given, and carbolic acid, $\text{m} \times$ a day, with Dover's powder or a hypodermic injection at night. The patient left the hospital after one month; to-day he presented himself at the dispensary in apparent health and anxious to obtain consent to return to work. The pus was examined by *Dr. Morison* who found no liver cells but bile present.

STATED MEETING HELD DEC. 20, 1881.

S. C. CHEW, M. D., President in the Chair.

(Specially reported for the Maryland Medical Journal).

SUPPOSED INTRA-CRANIAL ANEURISM OF CAROTID.—*Dr. Miles* made some remarks in regard to the case reported by him at the meeting of Nov.

15th (see *Md. Med. Journal*, Dec. 1st). He believed it to be an aneurism of the carotid. The lady has had her child, but the buzzing continues as loud or louder than before. Ptosis of the right eye and double vision also continue. The vision is blurred and there is a sensation of shaking or tremor before the eyes. The pupils are still active, conjunctivitis is plain, the vessels being very tortuous indeed—as if from non-return of blood. The right eye responds fully to the touch of the ciliae. There are no cerebral symptoms. The increase in the aneurism has not been very rapid. General health quite good.

PROFUSE HEMORRHAGE FROM WOUND OF VAGINAL PLEXUS.—*Dr. Chew* reported the following case: A lady, æt. 45, still menstruating, and having just entered upon one of her periods, got up on her bureau for some purpose, when she fell with one limb on each side of the back of a chair. The vulva was lacerated so that she bled profusely. She attempted to reach the bath room but fainted. When *Dr. C.* arrived she had lost (in ten minutes) from 1 to 1½ gals. of blood. He gave her a drachm of Fluid Ext. of Ergot and a wine glass of whiskey. The Ergot was repeated, 20 gtt. every hour, and the vagina was packed with styptic cotton. Quietude was enforced until evening when she was lifted on to a bed. Her pulse was then very feeble. Next morning the pulse was better. On removing the tampon the hemorrhage returned; the tampon was then replaced and retained for 24 hours, after which there was no further bleeding. He had never seen a patient so near the verge of death from such a cause. The wound was on the right side and just within the vulvar orifice.

Dr. Morris referred to first coitions and to the breaking of chambers on which patients are sitting, as causes of such hemorrhages.

POST-PARTUM HEMORRHAGE THREATENING LIFE.—*Dr. H. P. C. Wilson* related the following case: 13 mos. ago he attended a woman in her first labor; she had lacerated perineum, which was cured by serres fines. She recovered after a septicæmia. 10 days ago she had a natural labor. Chloroform was used as

the head passed the perineum. The labor natural without any rupture. The uterus was kept pressed down but 10 minutes; after the birth it grew soft, she complained of sickness at the stomach, and fainted. There was an immense loss of blood. 3 ij ergot with 3 vj whiskey were given, and the placental site was raked with the finger nails. There was some contraction. The ergot was repeated; in 1½ hours 3 iss of Squib's Fl. Ext. were given. The hand was repeatedly expelled. The uterus was then packed with ice. The woman was growing faint, and all the measures used had failed. The nozzle of a Davidson's syringe was now passed into the uterus and hot water—hotter than the hand could bear—injecting to the amount of Oijj. Under this uterine contraction occurred. This was the 5th case in *Dr. W.*'s experience of post-partum hemorrhage to give him apprehension. This lady had been under great mental strain for some time previously. Both her mother and grandmother had had profuse hemorrhages after labor.

Dr. P. C. Williams related a case of hemorrhage after 1st coitus. There was an unusually developed hymen with a ring at the outer edge. This had been partially divided; complete division stopped the hemorrhage.

Ergot is much more effective hypodermically. He had had 4 cases of post-partum hemorrhage; 3 of these were relieved by the hypodermic use of ergot, in one this failed, and this was relieved by injection of the persulphate of iron. He did not believe that chloroform predisposes to hemorrhage but as a precaution always precedes it by ergot.

Dr. Miles relieved a case which nearly bled to death by electricity after the failure of ice, ergot, and the hand. The poles were introduced together then separated. The alternate relaxation and contraction which had gone on before the use of the current ceased and permanent contraction took place.

Dr. Wilson had used ergot in one case every way without effect; in another the hypodermic use of it failed.

Dr. Chew had had two cases of profuse bleeding which were both relieved very promptly by the hypodermic of ergot.

EDITORIAL.

THE ANNUAL MEETING OF THE STATE FACULTY.—The next annual meeting of the Medical and Chirurgical Faculty of Maryland will convene in this city on the second Tuesday in April. It is the general impression that this meeting will be one of more than usual interest and value. The programme has not as yet been announced by the executive committee but it is understood that the number of papers to be presented is larger than at the last meeting. It is thought, too, that the chairmen of the sections will be able to present full and instructive reports of the work performed in the state during the past year. The year has been marked for much activity in professional work, which if properly brought out by these reports will add materially to the volume of the Faculty's Transactions. This is especially noticed in the work before the Obstetrical and Gynecological Section. For the first time in the history of the Faculty this Section was organized at the beginning of the year and monthly meetings have been held, with the exception of the three summer months, at which the attendance has been good and the interest manifested very striking. This section fully illustrates the value of organization and well directed effort in medical work and it has established a precedent which we hope will be observed by every section during the coming year. It was the original design of the Faculty that each section should have an independent organization and plan of working and at stated intervals hold meetings at which questions relating to each special object should be discussed. At the annual meeting the sections should then report their progress during the year. It has, however, been the custom for the sections to report in a general way upon medical progress, if they reported at all. So far as we are informed the Obstetrical Section has during the past year fulfilled, for the first time, its true functions, and it is the only section which has done so. It will be shown, we think, at the annual meeting that each section has a right of existence in practical organization and we would urge the president of the Faculty to consider this fact in making

appointments upon the sections and to give these positions only to gentlemen who will manifest an interest in the special work assigned to them, and who will give a real expression to this work by organization.

An effort will be made upon the part of the invitation committee to secure a full delegation from the county societies and from the profession at large throughout the state. Arrangements will be made for the entertainment of visiting members and those who may desire to attend who are not members. We therefore urge all who can to come to the meeting. We think we can promise them a profitable and pleasant occasion. We would, also, again urge all who can to become members of the Faculty. It should be the duty of the profession in Maryland to give a warm support to the purposes and objects of this organization not only by seeking membership but by actual participation in its deliberations. This duty especially we would urge upon the younger members of the profession who have a real and personal interest in the establishment of a strong medical organization in Maryland. At this time questions of vital importance are being brought to the notice of the profession, questions which should receive the fullest consideration by organized medical bodies. We refer to certain bills now pending before the state legislature and to certain professional interests which from time to time fall under the consideration of the civil authorities.

We regret to say it, but it is a fact that the medical profession is less true to its interests and rights as a body politic than any class of men, of which we have knowledge. It is time that, as a profession, we were more thoroughly and harmoniously organized and were more earnestly aroused to the necessity of protecting our rights and privileges as relates to our duties to private and public interests.

We do earnestly hope that the profession will consider the influence and value of this State Society and that it will receive at this meeting the attention and support it so well deserves from every man who loves his profession and who practices it with high and earnest motives.

REVIEWS & BOOK NOTICES.

Eczema and Its Management. A Practical Treatise, based on the Study of 2,500 Cases of the Disease. By L. DUNCAN BULKLEY, A. M., M. D., Attending Physician for Skin and Venereal Diseases at the New York Hospital, Out Patient Department, &c , &c. 8vo., pp. 344. New York : G. P. Putnam's Sons. 1881.

This volume embodies the views and personal experience of an indefatigable student, teacher, writer and practical physician upon a subject which embraces more than one-third of all the cases of skin diseases that are to be met with, and in which he has had most extensive opportunities for investigation (the basis of which was an essay on "The Management of Eczema," read by the author before the American Medical Association in 1874.) This is not the first instance in which an entire volume has been devoted to the subject of Eczema alone, this having been previously done by Erasmus Wilson, McCall Anderson, Tilbury Fox and others.

The present author strongly advocates the constitutional origin of Eczema, and the necessity of investigating and removing as far as possible systemic disorders. The pathological process of artificial dermatitis is not, he acknowledges, apparently different from that taking place in acute eczema, but this resemblance does not prove an identity in mode of origin. The relation of the two is compared to that of a sprained joint and true rheumatism. Only in a very small proportion of persons does the author believe true eczema to commence in a local irritation, but in these cases an eczematous diathesis may always be discovered. Among the most common constitutional causes are mentioned the gouty and neurotic states and scrofula. Numerous exciting causes are enumerated, as digestive disorders, menstrual difficulties, pregnancy, lactation, dentition, varicose veins, &c. The recognition of the constitutional origin of Eczema does not necessitate a belief in the danger of checking or removing the eruption by local measures, of which the author has seen not the slightest evidence but quite the reverse.

The general consideration of the subject is followed by that of affections of the various regions of the body.

The volume concludes with a chapter devoted to formulæ.

The author does not claim that this work is exhaustive of the subject. Nevertheless, we believe that it will prove one of great popularity, since it is written in a clear and simple style, and printed in such large type that it becomes both easy and agreeable to read. These qualities, together with the reputation of the author for careful and conscientious work, assure for his book a cordial welcome at the hands of reading members of the profession.

A System of Surgery, Theoretical and Practical. Edited by T. HOLMES, M. A. Cantab. Revised by JOHN H. PACKARD, A. M., M. D., and others. First American from the Second English Edition. Vol. III. 8vo. pp. 1059. H. C. Lea's Son & Co., 1882.

This volume completes the work The subjects treated in it are these: Diseases of the Respiratory Organs, Diseases of the Bones, Joints and Muscles, Diseases of the Nervous System, Gunshot Wounds, Operative and Minor Surgery, Miscellaneous Subjects. The names of the revisers are Drs. Cohen, Markoe, Bradford, Bartholow, McGuire, Reeve, Hunter, Packard, Morton, McGraw, Van Harlingen, Leidy, Ashhurst and Folsom. Two hundred and thirty-five illustrations have been added by the revisers. The most important additions to the text have been new sections upon Diseases of the Skin, by Van Harlingen, and upon Operations Upon the Arteries and Various Operations, by Packard; An Appendix on Hospitals, by Folsom, and Notes on the Sections on Chloroform, by Reeve, and Anæsthetics, by McGuire.

The solid and compact appearance of the volumes, their beautiful binding and, above all, the practical value of the additions made by the revisers establish the superiority of this work, whose authority in matters purely surgical is universally acknowledged by the leading surgeons of the world.

A New Medical Journal.

We have received the first number of the *Missouri Valley Medical Journal*, a monthly publication, edited and published by Drs. W. C. Boteler and F. C. Hoyt, of St. Joseph, Mo. The first number contains forty-eight pages of original and selected matter, well printed and carefully arranged, giving the journal a useful and highly creditable appearance. The senior editor, Dr. Boteler, is a native of Maryland, and a graduate of the University of Maryland, class of 1879. Dr. Boteler has located in St. Joseph, and, by dint of energy and application, has made for himself a position of influence and usefulness in that city. He has embarked upon the troublesome sea of journalism with a full sense of its perils, and no doubt will be fully competent to steer his journal clear of the dangers which so often overtake such enterprises. This first number gives evidence of much thought and labor in its get up, and shows that the editors appreciate the responsible trust they have assumed as leaders of professional opinion in the Great West. We wish for the *Journal* that support it so well merits.

Diseases of Women. By ARTHUR W. EDIS, M. D., Lond., F. R. C. P. Illustrated. Pp. 563. Henry C. Lea's Son & Co., Philad., 1882.

Percussion Outlines. By E. G. CUTLER and G. M. GARLAND, M. D., Boston Pp. 65. Houghton, Mifflin & Co., Boston, 1882.

Memoranda of Physiology. By HENRY ASHBY, M. D., (Lond.) Manchester, England. Pp. 309. Wm. Wood & Co., New York, 1882.

A Study of the Tumors of the Bladder. By ALEX. W. STEIN, M. D., New York. Pp. 94. Wm. Wood & Co., New York, 1882.

A Manual of Organic Materia Medica. By JOHN M. MAISCH, Phar. D. Pp 431. Henry C. Lea's Son & Co.

Sensation and Pain. By CHARLES F. TAYLOR, M. D. Pp. 77. G. P. Putnam's Sons, New York, 1881.

Marriage and Parentage. By a Physician and Sanitarian. M. L. Holbrook & Co., New York, 1882.

The Study and Practice of Medicine by Women. By JAS. R. CHADWICK, Boston. (Pamphlet) Reprint. A. S. Barnes & Co., New York City.

Obstetric and Gynecological Literature 1876 to 1880. By JAS. R. CHADWICK, M. D., Boston. [Pamphlet.] Reprint from *Boston Med. and Surg. Journal*, Sept. 8th, 1881. By SAM'L AUTHOR. The Hot Rectal Douche. Reprint from *Gynecological Transactions*, 1881.

Dedication of the New Building and Hall of the Boston Medical Library Association, and Order of Exercises and Addresses, Dec. 3, 1878. Printed at the Riverside Press, Cambridge, 1881.

MISCELLANY.

INEQUALITY IN THE LENGTH OF THE LOWER LIMBS.—This has hitherto been regarded as an exceptional deformity. Dr. Hunt called attention to the fact that symmetry is exceptional rather than the reverse. Drs. Cox, Wight, Roberts and Dwight have made careful measurements of 114 healthy persons and 19 skeletons and have found that "the greater number of limbs, comparing the limbs of the same person, show a difference in length. About one person in every five has limbs of the same length." The difference is usually from one-eighth of an inch to an inch. Mr. Callender after examining 40 persons, found only two with limbs of unequal length; but Dr. Morton (Surgeon in the Penna. Hosp) brings additional evidence in favor of the idea that asymmetry is the rule. In 513 boys examined between the ages of eight and eighteen, the limbs were unequal in length in 272.—*E. H. Bradford, in Holmes' Surgery.*

PRIMARY CHLOROFORM ANÆSTHESIA.

—At a variable period after the beginning of inhalation of chloroform or ether, the patient passes through a stage of "primary anæsthesia," marked by total muscular relaxation. During this period the duration of which seems also to be variable, abscesses may be opened, luxations reduced, or any short operation performed, without any sensation of pain on the part of the patient; and on the withdrawal of the anæsthetic, the effects pass off at once without headache, nausea, or other inconvenience. The best way of detecting this period is to let the patient hold up one hand and to urge him to do so. As soon as the hand drops the time has arrived, and should be instantly taken advantage of. Extensive experience has convinced me as well as many others of the value of this simple fact in practice.—*J. H. Pickard, in Holmes' Surgery, American Edition.*

TREATMENT OF DIPHTHERIA.—

Chlorate of potash and tr. of iron are best prescribed in separate mixtures to be given alternately, or mingled at the time of administering, in such proportions as the medical attendant may direct. The iron must be given frequently, and in decided doses, say ten to sixty drops every two hours, hour or half hour. The chlorate of potash should be given in doses of from two to twenty grs. at similar intervals; care being taken to watch for any evidence of nephritic irritation, and to suspend it at once, should such complication be threatened.—*J. Solis Cohen, Holmes' System of Surgery.*

FURTHER experience has not changed the relative position or very much enlarged the sphere of action of nitrous oxide. That it is the safest of all anæsthetics has been established beyond a question. In one institution where such administration is subject of record, this gas has been given

over 100,000 times, and not only without a death, but without causing in a single instance symptoms sufficiently serious to necessitate transporting the patient home in a carriage. In the city of Philadelphia, alone it has been given over 133,000 times without a death, and without any injurious results. Death cannot be justly attributed to it in more than four cases since its introduction.—*J. C. Reeve, in Holmes' Surgery, American Edition.*

SLAKING LIME IN DIPHTHERIA.—

Inhalation of the fumes of lime in process of slaking is often efficient in securing detachment of morbid products from the air passages and their expulsion by cough. This method should always be tried when time permits, before resorting to direct surgical procedure. Pending the resort to the lime, the vapor of steaming water may be inhaled, evolved from a special kettle, or from a pan of water heated by a portable stove of some kind by the side of the bed. In either instance the vapor can be directed towards the mouth of the patient by a funnel-shaped cowl extemporized from stiff paper. Sprays of lime water, lactic acid, bromine, and other drugs, are sometimes very useful for the same purpose; but the slaking lime seems by far the most reliable agent.—*J. Solis Cohen, Holmes' Sys. Surgery.*

TREATMENT OF INTERTRIGO.—

When seated at the anus in infants, the first indication to fill is to correct the inflammation of the bowel with subnitrate of bismuth combined with chalk; or better, by means of weak doses of hydrochloric acid. No powders are to be applied to the skin as long as the epidermis is healthy. If recent excoriations are present, diachylon ointment is capable of rendering service, and when that fails, recourse may be had to bichloride of mercury solution (1 grain to distilled water 3 xxii).—*Union Medicale, Jan. 31st.*

HOSPITAL APPOINTMENTS.—Dr. Harold H. Longsdorf of Pa., has been appointed Resident Physician to the City Hospital; Dr. W. Page McIntosh, of Ark., Resident Physician to the Maternité Hospital, and Dr. T. J. Shackelford, of Ind., Resident Physician to the Maryland Woman's Hospital. These gentlemen are recent graduates of the College of Physicians and Surgeons.

SOCIETY BULLETIN.—*Clin. Soc. of Md.* will meet Friday, March 17th, 8 P. M. Dr. Miles will read a paper on "Neuritis;" Dr. Tiffany will report a case of "Litholapaxy;" Dr. Bermann will make "Demonstrations of the Histology of the Healthy and Diseased Eye;" April 7th, Dr. Bevan. *Acad. of Med.* will meet Tuesday, March 21st, 8.30 P. M. *Med. Ass'n* will meet Monday, March 27th. Dr. J. T. King will open the discussion on "Contagiousness of Consumption." *Med. and Surg. Soc.* meets every Wednesday, 8.30 P. M. *Obstet. and Gynecol. Section, Med. and Ch. Fac. of Md.*, will meet Friday, March 24th, 8.15 P. M. Dr. P. C. Williams on "Ergot;" Dr. A. F. Erich on "Metrorrhagia" *Ophthalm. and Otol. Section, M. and C. F. of Md.*, meets 1st Wednesday of each month.

COLLEGE COMMENCEMENTS, ETC.

University of Maryland. The 75th Annual Commencement of this Institution was held on the 1st inst., at the Academy of Music. The weather was unpropitious and interfered somewhat with the attendance. The degrees were conferred by the Provost, Hon. S. Teackle Wallis, LL.D., on 69 graduates. The prizes were awarded as follows: 1st prize, a gold medal, to J. Mason Hundley, of Va., with honorable mention of Hiram Woods, Jr., of Baltimore. Miltenberger prize, a set of obstetrical instruments, to J.

M. Hundley, and a second to Horatio B. Hollifield of Georgia. Chas. H. Cockey prize, an amputating case, to Allan Kerr Bond, of Baltimore. Chisolm prize, an ophthalmoscope, to Howard F. Mitchell, Allan Kerr Bond receiving honorable mention. The annual address was delivered by Prof. I. Edmondson Atkinson; it will appear in the next issue of this JOURNAL.

The Alumni Association met the same evening in the parlors of the Carrollton Hotel, Dr. J. R. Ward President in the Chair. Addresses were delivered by the President, Prof. Bartholow (class of 1852) and Dr. J. W. C. Cuddy of Baltimore. On recommendation of the Prize Committee \$50 were awarded to Dr. Randolph Winslow, for his essay, entitled "A study of Malformations, Variations and Anomalies of the Circulatory Apparatus in Man, &c." Dr. Christopher Johnston was elected president for the ensuing year. The banquet and toasts occupied the remainder of the evening. The exercises were interspersed with songs by the alumni chorus.

College of Physicians and Surgeons. The 10th Annual Commencement of this College took place at the Academy of Music on the 1st inst. The address was delivered by Hon. A. M. Keiley, of Richmond. The degrees were conferred by Prof. A. B. Arnold, on 151 graduates. The prizes were awarded as follows: Edwin Van Note, of Mo., Cathell medal and 1st College Prize; Harold H. Longsdorf, of Penna., Brown Memorial Prize and 2nd College Prize; W. Page McIntosh, of Ark., Howard Memorial Prize and 3rd College Prize; R. Fred. Frost, of Ohio, 4th College Prize; C. A. Northrop, of N. Y., 5th, and Eugene E. Webster, of Penna., 6th College Prize. The alumni meeting and supper were held the same evening at the New Assembly Rooms.

The Baltimore Medical College held its first commencement at the Academy of Music on the 7th inst. 17 graduates, one a female, received the degree of M. D.

OBITUARY.

DEATH OF SAMUEL PRICE SMITH, M. D., of Cumberland.—This venerable physician, one of the last links between the present generation of Maryland physicians, and those of 70 years ago, expired at Cumberland, on the 1st inst. shortly after midnight. He was the son of Dr. Jos. Sim Smith, one of the incorporators of the Med. and Chir. Faculty of Md., and was born in Frederick county, Dec., 21st, 1795. He took part with a Virginia regiment in the campaign of 1814 near Baltimore and shortly after began his medical studies at the old Maryland Hospital on Broadway, under Dr. Colin Mackenzie. He remained here two years, attending lectures at the Univ. of Md., where he graduated in 1817. Since 1820 he had resided in Cumberland, being engaged in active practice, and had amassed a considerable fortune. He was President of the Alleghany Co. Medical Society from 1867 to 1875, and President of the Med. and Chir. Faculty of Md., 1878-79. Dr. Smith was a high-toned gentleman and earnest and conscientious physician, devoting himself exclusively to the practical part of his profession. He was the oldest living alumnus of the Univ. of Md. and his diploma is fortunately in the possession of the Alumni Association, an interesting relic of the earlier years of the University. Appropriate resolutions were adopted by the Med. and Chir. Faculty of Md., and by the Alumni Association.

MEDICAL ITEMS.

Spurious tobacco is now said to be extensively manufactured from beet-leaves, also from the leaves of the chicory and cabbage.=Lime in saccharated solution is said to be the best antidote for carbolic acid.=The Resident physicians, etc., at the University Hospital (Baltimore Infirmary) have been reappointed for the ensuing year.=Prof. Joseph Pancoast, of Phila. died March 7th, aged 77.=In the manufacture of condensed milk from 375 to 430 qts of fresh milk are evaporated to produce 100 qts.=The New York State Board of Health has adopted resolutions recommending the "separate system" of sewerage.=J. S. Cohen has had considerable success in treating goitre of recent origin by local applications of a saturated solution of iodoform in ether, chloroform or collodion. His applications are repeated daily with occasional intermissions whenever the skin becomes too tender.= "It will certainly not be the fault of the trustees if this hospital" (the Johns Hopkins) "does not surpass in excellence anything which existed before."—*Folsom, in Holmes' System of Surgery, American Edition.*=According to the statistics collected by Dr. Bulkley, of New York, eczema forms 34 per cent. of all skin diseases.=Very considerable experience for the last four years with the solid rubber bandage leads Dr. Bulkley to say most decidedly, that in the vast majority of cases it is unexcelled for the management of eczema and also of eczematose and varicose ulcers of the lower extremities.=Dr. Bulkley considers hot water, "so hot that the hand cannot be wholly thrust into it," to be the most effective means of relieving the intense itching of eczema of the anus; to be used just before going to bed.=The Woman's Medical College of Baltimore has been located at No. 126 N. Eutaw above Franklin Street.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

ADDRESS TO THE GRADUATES
OF THE UNIVERSITY OF
MARYLAND, SCHOOL OF
MEDICINE, DELIVERED AT
THE ANNUAL COMMENCE-
MENT, HELD MARCH 1st, 1882.

BY I. EDMONDSON ATKINSON, M. D.,
Prof. of Pathology and Clin. Prof. of
Dermatology.

GENTLEMEN:—Today we sever the relation of teacher and student. The eminent gentleman, whom it is our privilege to honour as the Provost of this University, has conferred upon you the right to pass beyond the portals and to enter the precincts of the Temple of Medicine. Henceforth, you are to become teachers; upon you, now devolve new responsibilities, such as can only be worthily borne by those who realize, and realizing, endeavour to fulfil the obligations they owe to their fellows. The profession you have chosen has for its aims the perfection of that noblest of sciences, the knowledge of human life, that loftiest of arts, the preservation

of health, the prolongation of life, the healing of disease. These are of all sciences and arts, the most difficult, for while laborers in other directions reach their goal over the piled-up ruins of many failures, the rubbish over which they may heedlessly tread in their search for truth, human life is too precious to allow of that unlimited experimentation, by which facts may be more rapidly accumulated. It can be no reproach to our profession, therefore, that, insofar as it is scientific, it is less complete than other branches of knowledge; that insofar as concerns the art of medicine, it is less perfect than a number of other arts. It could not be otherwise, for, as our objects are the loftiest, so must their attainment ever be the most arduous.

At this, your final meeting as a class, what could be a more appropriate subject for your consideration than a brief exposition of the present status of medicine, the claims it has, first, upon your own love and veneration, and then upon the whole human family, for the alleviation of whose sufferings, it has its existence.

To attain success in life, success in its noblest, truest sense, I mean, a steadfast undaunted striving is essential. You do not, cannot imagine that from to-day, you stand before the world, prepared to meet whatever demands may be made upon your skill; and yet it is only too true, that there are those who consider the attainment of a degree, simply as the official authorization to receive the fees for which they can give but sadly inadequate return. I trust that among you there are none who will be actuated by such sordid motives. What I would rather warn you against, is the danger of falling into routine habits of thought and action, into that condition of self-satisfaction that is bred by mental indolence. This is no idle warning, nor is the danger one to which the base only are exposed. The wheels of our lives fall readily into ruts and follow wherever these may lead, though the easy grade may carry us to destruction; while if we cherish nobler aims in life, we must be content to toil along rough and pathless ascents to attain the objects of our search. If you would live in accordance with the dignity and requirements of your profession, this toilsome life must be yours. Your work will never be done; students you must remain to the very end of your lives. By study alone can you learn to appreciate the true nobility of your calling; by unremitting effort only, will you be able to feel that your living will be earned and not won from a public, unprepared to estimate your attainments at their true value. You have, then, before you, lives of study, of unremitting exertion; but as one gathers flowers from prickly thorns, so may, from a life's work, its joy and happiness be reaped; and the primeval curse become changed into a blessing.

Let me not be understood as implying that the true student is he who delves among his books for that com-

pleteness of knowledge that can only be reached by a judicious application of the recorded wisdom of others to results obtained through one's own experience. The practical physician, he who makes a business of his profession and yet cherishes a love for nature's operations, is the one who becomes the true benefactor of his kind; it is he who applies the knowledge that the investigator and experimenter have made available; it is he, who mastering the details of his profession becomes the skilful physician and learns to despise the plausibility of the "quack" whose impostures are concealed by a veil through which most eyes cannot penetrate. The assumption of knowledge and skill are apt to be mistaken for knowledge and skill, and there are but few, who can detect the lie. Nor is the practical physician less imbued with that broad and noble altruism, that should inspire the breast of him who ministers to human suffering. I have no sympathy with the sentiment, that the aims of the medical man should be purely philanthropic. To constitute a good physician, something more is needed than simple love for one's fellows. There must be love of truth, thirst for knowledge, aptitude for labour. There must be ambition, and finally, with rare exceptions, for we are but human, there must be the stimulus, that flows from the desire to acquire wealth. The able physician must be a humanitarian, but he who is a physician from purely philanthropic motives, will assuredly be but a poor physician. The practise of physic, then, affords the broadest field for the exercise of those virtues that appertain to our art. But there are paths that may be followed, that lead to stations hardly less honorable. Some of you, there are, whose tastes entice you to search after knowledge for its own sake, whose labors will be within the walls of the laboratory, or of the hospital ward, or possibly, in some of the de-

partments of science, with which our profession stands so closely related. If medicine is ever to attain the exactness of a science it must be through the coöperation of the practical physician with the patient observer and experimenter. One but too often hears the self-complacent sneer of the "practical man" at the labors of the scientific physician and theorist. How ungrateful! How unjust! How much do we not owe to the labors of these men? Facts, piled never so high, often remain but a chaotic mass until the scientific theory is elaborated, that shows to what conclusions they lead and supplies the links missing in the chain of evidence. The biologist, the physiologist, the chemist, the experimenter—are the pioneers who discover and lay out the land and prepare the way for those of less adventurous spirit and homelier tastes who shall reap the harvests.

Of your number, a few are probably destined to reach a higher round in the ladder of fame than your fellows. You will not forget that reputation does not always depend upon merit. It may be that the hidden fire of genius smoulders within the breast of him who is content to walk in the valleys; it may be that the star of ambition beacons up the mountain side him whose mediocrity of intellect is no barrier to the fixedness of his purpose. Carlyle has said, "fame, we may understand, is no sure test of merit, but only a probability of such: it is an accident, not a property of a man; like light, it can give little or nothing, but, at most, may show what is given; often it is but a false glare, dazzling the eyes of the vulgar, lending, by casual extrinsic splendour the brightness and manifold glance of the diamond to pebbles of no value. A man is in all cases simply the man, of the same intrinsic worth and weakness, whether his worth and weakness be hidden in the depths of his own con-

sciousness, or be betrumpered and belshouted from end to end of the habitable globe." You will soon learn, if you have not already found out, that many things besides professional merit contribute to form a reputation and that the "brightness and manifold glances of the diamond may be lent to pebbles of no value," the imposture escaping the eyes of all but an experienced few, who are not to be deceived by the "fictitious splendour of the pebble" which they estimate at its true value.

As priests of the God of Medicine, you may now penetrate and explore at will the many and varied chambers his temple contains. Let us pause awhile and contemplate the treasures there stored up; let us estimate their value. To correctly appreciate the debt the world owes to medicine, it will be necessary to glance back at the origin of the healing art in the infancy of mankind.

When ignorance and credulity taught men that whenever the relation of cause and effect was not revealed to their grosser senses, the workings of a supernatural influence were to be concluded, how infallibly must the processes of disease have been considered as punishments inflicted by an angry deity? To whom would men turn for relief from their visitations rather than to those whom they regarded as the immediate instruments of the divine pleasure? What methods of relief would be adopted by those who saw in an injury, a disease, not the result of natural causes, but the malignity and caprice of an offended deity, in preference to the sacrifices, the incantations that were supposed to propitiate his anger? In all races of men, the healing art seems to have been first practiced by the priesthood exclusively, and not upon rational principles, but as one of the mysteries of their craft. It is evident that but little progress could be made in medicine, while it served simply as the

handmaiden of religious mysticism. To the "sage of Cos," Hippocrates, who lived in the fifth century before Christ, was due the first effort to establish medicine upon an independent and scientific basis. With him rational medicine had its birth. The world was not ripe, however, for the methods of thought and work that have since borne such glorious fruits, but was given over to the study of philosophical systems, based, not upon facts, but upon mental processes and entirely independent of facts. So it was, that while Hippocrates may be justly called the father of medicine, many centuries elapsed, reaching away down through those dark ages of the human mind, during which it was weighted down by the chains of superstition or throttled by the hand of "authority;" during which it was considered impious to doubt what had been previously written, and what Hippocrates or Galen had said, no man dared dispute. Think of it! For a thousand years after Galen, medical writings were restricted to the reproduction of the works of the fathers of medicine, with commentaries(!). But how could it be otherwise? The world was sinking into that intellectual torpor out of which man could only find an escape in the tented field or in the cloister. Intellect could find but two paths open to it; that of military glory, based upon the tears of suffering and sorrowing millions, and that of ecclesiastical preferment, offering to many loftier and subtle spirits opportunities that physical incapacity deprived them of elsewhere, or that their nobler and purer natures shrank from seeking in the more glorious, but dreadful profession of arms.

It is fashionable to mourn over these degenerate days and to recall with glowing imagination the glorious days of chivalry, when the mailed Knight stood ready to battle for the right and to stay the hand of the oppressor. In

the misty light of history, our eyes can perceive only the few actors in these scenes; but our imaginations call up the millions of beings, who seem to have lived only to set forth the glory of their oppressors. It is but an occasional glimpse of the life histories of the humbler humanity of those days that we are able to gain; but from what we know of human nature as studied in ourselves, it is to be feared that he who battled for the true and good fought under the assumption that the false and bad were typified in his opponents.

During these ages, however, medicine was not entirely neglected. From time to time a great physician arose to give a stimulus to medical studies; but he and his teachings, speedily sank in the waters of oblivion, or, surviving in his writings, would float aimlessly about on the sea of speculation. It would serve no present purpose to mention these. Whatever progress was made, rested upon the personal influence of a man of genius; that support being withdrawn, the superstructure tumbled in ruins. Natural and experimental science was yet to be born. It is not difficult to understand the influences that foster the growth of an art or science.

During times of perturbation, when peoples are struggling for existence or supremacy, divided into factions, the military and religious classes become supreme; all is made tributary to their interests. But as peace smiles upon the land, men turn their thoughts into other channels. The pleasures of living are felt to be increased, by the multiplication of the opportunities of enjoyment. Aesthetic and utilitarian objects begin to be cultivated. The development of arts and sciences follows surely, inevitably. And yet, it may be objected, the ancient civilizations show all this. Art flourished, science developed thousands of years ago; nevertheless, barbarism followed upon the heels of

culture and strangled it in the first onslaught.

Buckle has shown that the cause of the evanescence of ancient civilization was in itself. It was not a civilization of the masses. It was made tributary to the aristocratic classes alone. It was a culture that resulted, not in the advancement of all, but in the development of caste. It was a civilization limited to circumscribed portions of the earth, which encircling barbarism overwhelmed when let loose upon it. Roman conquest, while it destroyed much of culture, prepared the world for better things by raising to a higher and more equal standing the nations under its dominion. Slowly and gradually, through the centuries, the interests of the governing few began to lose their importance as the objective points of national existence and the mighty influence of the people began to be felt in the council. Men began to doubt the dogmas of authority, to practice, instead of indulging in philosophical speculations, the study of natural and experimental science. The world was growing older and men began to think for themselves.

The immortal Leonardo da Vinci, among the first, in the 15th century proclaimed the fundamental principle that experiment and observation are the only reliable foundations of reasoning in science; that experiment is the only trustworthy interpreter of nature, and is essential to the ascertainment of laws. Henceforward inductive methods in philosophy came to occupy men's minds and to direct their operations more and more, until their principles found an exponent in Francis Bacon and the history of the world became changed. It could not be, however, that old world methods of thought, that old world prejudices and superstitions would be destroyed straightway. Nay, there linger even yet their smouldering fires; and superstition and prejudice still too often dominate the intellect. But these

smouldering fires are doomed to perish, for no fresh fuel is added to them, and but for the ashes that cover them up, the first breath of truth would extinguish them forever. Henceforth it is the truth that men seek, the truth regardless of consequences and irrespective of preconceived opinion. With the new philosophy, science has advanced, human happiness has increased: Knowledge is sought for through the observation of nature and the workings of her laws. Facts are piled upon facts, and conclusions are drawn from the consideration of them. With the safeguard of prevailing methods, deductions help us to reach our conclusions, by pointing out the proper direction for our labors.

It cannot be made a reproach to medicine that she has not joined in the onward march of knowledge. The laborers in her service have been as earnest, as gifted as those on any other field. The difficulties that surround her have been harder to surmount, but being surmounted, the results will be all the more glorious. The human mind has been so possessed with ideas of occult, supernatural influences upon its body, that natural causes are but reluctantly accepted for its various derangements. The influence of these beliefs is seen in the history of medicine as late as the end of the 17th century. The Archæus of Basil Valentine, of Paracelsus, of Van Helmont, enthroned in the cardiac end of the stomach, issued his mandates, to be executed by his subordinate spirits upon the various portions of the body. The influence of evil spirits in producing disease was universally admitted. But the new order of things was rapidly sweeping away the rubbish, and with rapid strides experiment and observation carried men on to new discoveries.

To correctly estimate the progress that has been made in medicine, one must bear in mind the Hippocratic

aphorism "ars longa, vita brevis est," art is enduring, life is evanescent. To crowd into the brief period of a human life, all the stages of a developing art or science would be impossible. They extend through the centuries, those moments in the chronology of nature. We who regard ourselves and our epochs as the objects towards which all nature has been striving as a culminating point, are disappointed, if to us does not come the perfect fulness of knowledge. Let us, for a moment shake off our delusive egotism, and consider what a single cycle of the world's countless years has seen come out of medical research.

I cannot more than remind you of the incalculable advance that has been made in the science of medicine, through modern chemistry and physiology, through the creation of the science of pathology, through the application of instruments of precision to the study of disease. The bare enumeration of these would occupy a time exceeding that at my disposal. My object is rather to enumerate some of the many triumphs of our art, in the preservation of health, the alleviation of suffering, the cure of disease. Passing over the countless valuable minor additions to our pharmacopœia, need I remind you that in 1819 iodine was first employed in medical practice—since when to what hosts of humanity has it brought heavenly relief from pain, and hideous deformity; that in 1841, cod liver oil first began to clothe with health and vigor the wasted form of the consumptive; that in 1820, quinine was discovered and incalculably widened the field of usefulness of cinchona bark; that in 1826, bromine became known (what marvellous results have followed the use of its salts); that within the memory of most of us, salicin and the salicylates have begun to exert their anti-rheumatic properties, nitrite of amyl to relieve the torturing spasm of angina pectoris, hydrate of chloral to

induce the "sleep that knits up the ravelled sleeve of care," pepsin to assist the flagging digestion, the intelligent use of electricity to renew the strength of the palsied muscle? But why continue. Far greater even than these discoveries, has been the knowledge we have gained of the proper application of remedies, of the rational management of disease. In surgery where the processes of disease are more tangible greater progress has been made. Whole departments of surgery have been created. This age and indeed this nation has built gynæcology into a stately structure. Ophthalmology has had a new-birth, and the blind see, where all was hopeless darkness. Need I more than refer to the genius of McDowell, of Sims, of Von Græfe. With what a glorious reward have the labors of Bigelow been crowned! What untold blessings have been conferred by the principles of antiseptic surgery, represented by the procedures of Lister! But the crowning glory of the century rests in two discoveries that shall receive the everlasting gratitude of the world, and shed an undying splendour upon the age, the production of anæsthesia, the temporary abolition of consciousness and pain, and the prophylaxis of small-pox, through vaccination.

What names deserve the credit of introducing anæsthetics to the knowledge of the world, need not at present concern us. They should not, will not be forgotten. The discovery has conferred upon mankind one of its priceless blessings.

Declared by the immortal Jenner in 1798, the protective power of vaccination against small-pox has only failed to sweep this pest from the face of the earth through the ignorance and apathy of men. But Jenner's discovery has done more than this. It started men's minds to think in a special direction. If vaccination will prevent small-pox, may there not be analogous diseases that

will rob other contagious affections of their terrors? The thought suggested itself; its practical realization presented almost insuperable difficulties. Having no scientific basis upon which to build, one knew not where to begin. Indefatigable labor brought no reward. The birth of a scientific germ theory of disease has supplied the materials to work upon. The movement taking its origin in the wonderful researches of Pasteur has resulted in the discovery of micro-organisms in which reside the essential principles of certain infectious diseases; more than this, it has developed the astounding fact that in the brute creation, the inoculation of the artificially modified virus of at least two diseases, anthrax of sheep and cholera of chickens, will protect these creatures from the dangers of subsequent infection. I cannot here recite the method by which the contagious principle is modified; it is enough to know, at present, that after inoculation of a definite culture preparation of the virus, no danger from the disease is to be apprehended. The principle once established for affections of the lower animals, the probability of its prevalence in certain infectious diseases of man becomes so strong, that we can but feel that the harvest is ripening and will soon be gathered in; that we are on the verge of startling discoveries and that before many years, the world will owe to medicine, a new debt, not inferior in its magnitude, to any.

To prevent the occurrence of disease is infinitely better than to cure it, having occurred. With prophetic eye we can mark out the path along which the medicine of the future is to win her greatest victories. That considerable progress has been made in the observance and recognition of laws of health is evident. The life of man has lengthened, and in the lengthening who can calculate what increase of comfort, what freedom

from pain, what enjoyment of living, has resulted. In the coming centuries those to whom will be confided the public welfare, under the influence of a more perfect understanding of laws of health, will build cities of Hygeia where the prevention of disease will form the first of public duties.

To you who to-day start out upon independent careers the noblest fields are offered. You come upon the field of action at a period of the world's history, when its great heart throbs with the emotions that a love of nature excites. Nurtured in the secret cell of the recluse, of the astrologer and alchemist, science has torn asunder bonds of superstition, and walks the highway with head erect; with unfaltering glance she pries into whatever dark recesses the light of truth has not penetrated and with her hands cuts a path for the sunbeams to enter. Limits there are and must ever be to the onward march of knowledge, but where these limits are we know not, nor can we even guess. The idle fears that science may wander into forbidden pastures finds a typical illustration in the story from the Arabian nights, where the calendar, having explored the ninety nine gorgeous chambers of the palace, was unable to resist the temptation to unlock the golden doors of the forbidden chamber, and had the cup of happiness snatched from his lips. Nature's palaces, more magnificent, are open to whomsoever will enter their portals. Him who essays to explore them nature kindly welcomes. "Search out the inner chambers and recesses of my abodes" she says, "much wilt thou find to reward thee. Doors wilt thou find locked, windows barred. Locks thou must open, bolts and bars unfasten before the light of day may stream in and illumine the object of thy search. Doors there may be, which thou *canst* not open. Of these, greater ones than thou will find

the keys of some; others, not even *they* will pass beyond—they are impenetrable.”

The Temple of Medicine is one of nature's palaces. I, as one of her very humble priests, welcome you to its halls. The edifice is vast. Many chambers yet remain closed; their mysteries are yet hidden; some will forever resist men's efforts to enter them. Seek first to explore those that you may freely enter. Many of you will be content to work in these, studying the wonders there unfolded and using the knowledge there obtained for your own and your brothers' profit, a noble aim. Others will seek to search out the hidden places and let in upon them the light of truth. Let us hope that none will lounge about the portals of the temple, too idle or too careless to join in the pursuit of knowledge; satisfied if the passer-by, seeing you at the threshold, attribute to you the knowledge and skill your opportunities have placed within your reach but by which you have not profited.

In bidding you good-bye, let me again remind you that the profession you have chosen is a grand one and justly entitled to your unflinching loyalty. Let your lives be spent so that they will contribute to its glory, whether your offering be as the cement that fastens or as the gem that is fastened in the crown.

OBSERVATIONS ON VACCINATION WITH BOVINE LYMPH.

BY JOHN MORRIS, M. D.

(Read before the Clinical Society of Maryland.)

In a paper on Vaccination, published in the *Sanitarian* some years ago, I took strong ground in favor of the use of the crust in preference to human lymph. I urged as a reason for this preference that the prophylactic properties of vaccination were

lessened by the abstraction of the lymph at a too early stage of the disease, before the constitutional symptoms were fully developed, and, that the crust contained the morbid principle in a higher and more concentrated form. The objections then urged to the use of human lymph do not so strongly apply to bovine lymph, and as the latter has come into very general use in our city and state, it may not be amiss at this time to offer some views on its peculiar action, gleaned from the experience of the past few years.

Bovine vaccination when first introduced about ten years ago into Baltimore proved almost a failure. This was owing to the character of the quills and points furnished to the profession. Our physicians disheartened by frequent failures went back to the use of the crust. Crusts obtained at that time from bovine virus one or two degrees removed from the heifer proved to be very valuable, apparently better than those obtained from human lymph. Since Doctor Regester has acted as State Vaccine Agent a marked change has taken place, and the use of bovine lymph has become, as I have before stated, almost universal. A statement of the conditions met with in the two forms of vaccination cannot fail then to have a practical bearing. In this investigation it will be only important to note those facts which are essential and not merely incidental.

Before proceeding to the discussion of the two forms of vaccination it may not be out of place to describe first what a true vaccination is and the symptoms and conditions which should attend its development and course. Unfortunately, there is very little attention paid by the mass of practitioners to this very important matter, the mere production of a vesicle being deemed sufficient evidence of a proper protective vaccination. There is always in the beginning of a

true vaccination a slight elevation of temperature. This is followed by a period of depression, something like that found in the other exanthemata, in which there is a general lowering of temperature. During this stage the child is dull and listless; the pulse and respiration are below the normal standard. Very frequently catarrhal symptoms manifest themselves at this stage. Papular elevations are seen at the point of vaccination and the vesicle begins to form. With human lymph this generally occurs about the fourth day, but with the crust and bovine lymph at a later period. Now a rise of temperature takes place and the depressed condition of the system is followed by a state of excitement. The true course of the fever can be marked by the evening exacerbation. About the eighth day the vesicle is fully formed. During the stage of fever the pulse is quite rapid and the breathing hurried. The temperature sometimes rises as high as 102° . In very young children, however, the fever is not so high and the symptoms not so well marked. As soon as the areola is fully formed the temperature suddenly falls and though the local irritation may seem very violent the constitutional symptoms abate and the disease as a disease is fully over. Some depression of temperature may last for several weeks—at least until the crust is removed and the cicatrix formed. There is a striking similarity between the progress of vaccinia and that of measles and scarlatina, and more particularly that of smallpox, save that, as a rule, there is no secondary fever in vaccinia. Should, however, local injury happen to the vaccine pustule, secondary fever may, and does, follow as a consequence. The protective power of vaccination rests solely upon the fact that the disease has run the course here indicated, and, in the absence of the

history mentioned, there can be no absolute protection secured.

In vaccination with bovine virus the manifestations and the course of the disease differ somewhat from the description here given. The symptoms are much graver, the vesicles are slower in forming, and, in development, frequently not arriving at maturity until the tenth day, and the areola not reaching its highest point until a later period. The pustule is larger, the areola more extensive, and the crust remains on the arm a greater length of time, in some instances for many weeks. The fever, too, is of longer duration, and the local action more violent. Eruptive diseases, such as roseola and erythema, are, too, a more common complication—at least, such has been the case in my experience. In this particular there is a great resemblance to smallpox. The bovine virus also disorganizes the structure of the *rete mucosum*, and, as a consequence, deeper pits are produced and a greater degree of foveation.

Let us now enter into the consideration of the two forms of vaccination, so that we may judge of their respective merits. The advocates of vaccination with bovine virus claim that it affords greater protection against smallpox, though this cannot be proved as yet by statistics. They say it is very probable, however, inasmuch as the vesicles produced by lymph from a heifer are much finer and the lymph is more crystalline in appearance though smaller in quantity. The surrounding areola is less indurated, the disease progresses more slowly and the cicatrices are better marked than in the case of lymph taken from a child's arm. This claim is no doubt just, as our own experience, already given, proves. The second advantage claimed is the obtaining of an endless supply of pure lymph. This is proved by statistics,

and, lastly, it is asserted that it is impossible to transmit disease by means of bovine virus. As to this last advantage we can say but little. The dangers of a spread of syphilis and diathetic diseases by the use of human lymph are, we think, very greatly overstated, and are used as a bugbear by the ignorant and narrow-minded men and women who oppose vaccination in general. If this theory be correct, the same precautions would be necessary in using animal lymph, for animals are subject to many diseases and "bestial humours," which may possibly be introduced into the human economy. It is a strange fact that those who so strenuously object to human lymph on this ground make no objection to the use of points tinged with the blood of the heifer. The State Board of Health of New York recognizes the necessity of the examination of animals used for vaccination, and gives positive instructions concerning the matter. Blood on points is entirely harmless, and is caused by the granulations being broken up in compressing the patches to exhaust the lymph. It is almost impossible in this process to prevent a certain admixture of blood.

There can be no doubt that vaccination in Europe, and to some extent in this country, has become imperfect and unprotective, owing either to the deterioration in the character of the lymph or to other causes. The vesicles obtained at this time by human lymph are not in many instances such as are described by Jenner. It is asserted that one of the advantages of bovine lymph is that it can be regenerated whenever a spontaneous case of cowpox occurs. This, I think, has not much weight, for I believe, with Hebra, that no degeneration of lymph can occur through ages if passed from one healthy person to another. All the defects that have occurred in vaccination with human

virus have proceeded from a want of proper precautions in the selection of subjects, and, as I believe, from the use of lymph abstracted before the full development of the vaccine fever. In animals the lymph is abstracted about the seventh day, but the constitutional symptoms manifest themselves on the third day after vaccination. On that day there is a depression of temperature, and the heifer droops and refuses to take food. By the seventh day the system is thoroughly saturated with the virus, and the animal suffers greatly from the effects of the constitutional fever. The abstraction of the lymph appears to give very great relief, and the heifer becomes lively afterwards and commences to take food as usual. Thus it follows that the lymph must be fully protective, as the blood of the animal is thoroughly impregnated with the constitutional elements of the disease. Under the English plan of vaccination from arm to arm, I am convinced that this is not always the case, and that the lymph is frequently used at too early a period. The disadvantages of bovine lymph consist in the lymph not keeping as long nor "taking" as well as human virus. However the experience of practitioners differs in this respect, some claiming that the results are about equal in both cases. Dr. Blanc and Dr. Foster differ in their judgment on this matter. The great trouble is that not sufficient care is taken, particularly in revaccinations. The health authorities should in all cases insist on the absolute necessity of revaccination being done by public officers, in a painstaking and scientific manner. As it is too frequently done, it only serves to deceive and produce a false sense of security. It requires a certain amount of time and care to produce a proper vaccination, and, in primary cases, at least three visits are necessary to examine and watch the

growth and maturation of the vesicle, as well as to observe the constitutional manifestations incident to the proper course of the disease. Under the old system of vaccination, the anxiety to obtain good crusts was so great that the patient was watched assiduously, and thus certainty was obtained in regard to the character of the vesicle as well as the attendant symptoms.

For my own part, I deem no vaccination protective unless its progress is characterized by the prodromic and constitutional manifestations described in the beginning of this paper as constituting a genuine vaccination. The readiness with which vaccination "takes" during an epidemic of smallpox is very striking, and there can be little excuse, then, for failures, provided the virus is of good quality. An objection made to bovine lymph is its extreme virulence at times. This can be remedied, Dr. Blanc tells us, by passing it through young heifers, for in the young of heifers, as in very young children, the local symptoms are not so severe. Dr. Blanc also says that virus that fails to produce vaccination in children will produce it in the heifer. No doubt many of the failures in the use of points and quills occur from the ignorance of medical practitioners as to the right process to be employed. A slight scarification, without drawing blood, or, still better, a scraping of the epidermis, and then rubbing the virus well into the wounded surface, is the proper mode. Doctor Foster, of New York, mentions several instances of amusing ignorance on this point. Some physicians scrape off the dried lymph, thus wasting the greater part of it. Others use the wrong end of the quill. Some employed the concave surface, wholly destitute of lymph, and one gentleman actually boiled the quill as a preliminary step.

To establish the true character of bovine lymph, more extensive and

systematic observations remain to be made. It is the duty of the profession to collect facts and give their experiences to the world, so that definite and accurate conclusions may be reached on this vital subject. From a consideration of the foregoing views the following propositions may be deduced:

First. That the healthy heifer, inoculated with pure, spontaneous cow pox, supplies a vaccine lymph which, when introduced into the human economy, produces all the symptoms to be found in vaccination by human lymph, but in a more marked degree.

Second. That the protection afforded by vaccination with bovine lymph may be presumed to be fully equal to that obtained by human virus, but this fact cannot as yet be proved by statistics.

Third. That the dangers from human lymph are greatly exaggerated, and, if they exist at all, may have a counterpart in the animal economy.

Fourth. That cow pox, transmitted through heifers, is more active and more violent in its effects than human virus, and, if these evidences are a proof of the efficacy of the vaccination, it must afford a more perfect immunity from smallpox.

Fifth. That, by the use of bovine virus, we can at all times have an ample supply of fresh lymph, a consideration of much weight in the event of an epidemic.

Sixth. As human lymph produces its action on the system at an earlier period than bovine lymph, it would appear to be better to use it in those cases in which vaccination is employed as an abortive agent.

Seventh. That further investigations are necessary to establish the true character of bovine lymph, and it is the duty of the profession to collect and publish all facts bearing on the subject.

A CASE OF METASTATIC CHOROIDITIS.

BY E. M. REID, M. D.

(Reported to Baltimore Med. and Surg. Society, Feb. 22nd, 1882).

A few years since I was called to see a gentleman, who complained of pain in his side, at the base of his right lung. He stated that he had been attended for several days by a physician who pronounced his case rheumatism. That up to within a week or so past he had enjoyed very good health. I at once proceeded to examine his side, when I found some dullness at the base of the lung mentioned. In about eight days I was gratified to find the pain and dullness leaving the chest; and whilst congratulating myself on the disease disappearing, I was surprised by my attention being called to a swelling in the right axilla, about the size of a small hen's egg, with slight fluctuation which led me to suspect the presence of pus. Not having a lancet with me, I told the patient that the next day I would probably open the swelling. On my return next day the swelling had entirely disappeared. Why it should have vanished and whither it had gone was the perplexing question, I was for two days trying to solve, when the patient complained of pain in the right knee, which upon examination, I found red, hard and swollen. I had promised myself a little recreation, and consequently left the city for the same. The case now fell into the hands of Dr. J. W. C. Cuddy, with instructions from me to open the swelling as soon as fluctuation occurred, which I supposed would be within the next forty-eight hours. The statement of the doctor was to the effect that some softening and slight fluctuation occurred, but before he felt justified in opening the swelling, it began to abate and entirely disappeared from the knee.

On my return from my summer's vacation I found my patient no longer troubled with his knee, but having rigors and suffering with an acute and violent inflammation of the eyes. The conjunctivæ and sub-conjunctival tissues soon became very much engorged, and considerable chemosis followed. There was some swelling and œdema of the eyelids, with a muco-purulent discharge issuing therefrom. The pupils were contracted upon deposits of lymph, and the irides pushed forward, with consequent diminution of the anterior chambers. There was intense pain in and about the eyes and great sensitiveness to the touch.

At this juncture Dr. A. Friedenwald was called in consultation, who advised and performed iridectomy, not in view of saving vision, for from the character and rapidity of the inflammation, this seemed almost impossible from the first, but for the purpose of lessening the tension, and thereby relieving the pain. The operation gave some relief, but it was now manifest that nothing more could be accomplished by any surgical means.

Now realizing the fact that in regard to the eyes the case would probably terminate, as such cases usually do—in perforation and atrophy of the eye balls—the next question was would the patient be spared his life? His rigors continued with abnormal temperature; his pulse was bounding and at times intermitting and irregular; his countenance was anxious, and there was distressing cerebral pain. The *materies morbi*, if it were pus, I believe began its work as an empyema in the right pleural cavity, attacked the axilla, then the knee, and later the eyes, lighting up the disastrous suppurative choroiditis of which I have just spoken.

Where would be the next objective point? From the symptoms it seemed the brain, and although that organ was threatened, I believe it escaped

by the elimination of the poison by the most copious transpiration I ever saw. For four or five days great drops of fluid would stand upon the surface until they would coalesce, and run off in streams. This transpiration was followed by an abatement of all the symptoms, and recovery of the patient's general health, but with loss of vision.

SOCIETY REPORTS.

BALTIMORE MEDICAL ASSOCIATION.

(Specially reported for the *Maryland Medical Journal*).

STATED MEETING HELD FEB. 13TH, 1882.

Christopher Johnston, M. D., in the Chair and 19 members in attendance.

After the transaction of routine business, *Dr. Taneyhill* asked for the opinion of members as to the best means of checking

HABITUAL ABORTION.—A young married couple in good health were anxious for offspring; this had not yet been granted them on account of repeated (five) abortions occurring to the wife since January 1878, at periods ranging from $3\frac{1}{2}$ to 6 months. In some of these no cause was assignable, in one it was attributed to coasting and a long walk, in another it was attributed to fright, and in another to a fall. In her last pregnancy, therefore, which terminated happily at term on the 30th December, 1881, he had kept the patient strictly confined to bed for the last $5\frac{1}{3}$ months. Notwithstanding, she lost not five pounds in weight. Symptoms of threatened abortion manifested themselves, however, at the same period every month. *Dr. Steuart* knew of a similar case.

Dr. C. H. Jones also had seen a case in which abortion had occurred 3 successive times. In the next pregnancy, therefore, he confined her to bed from the time evidences of quickening became apparent. He

also enjoined abstinence from sexual intercourse. By these means he brought the patient safely to term.

The President also remembered a similar case in his own practice where confinement for five months secured the desired object.

LACTATION AT AN ADVANCED AGE.—*Dr. Ashby* read a letter written by Rev. H. F. Brand, of Harford county, Maryland, and addressed to the President, in which the case of an infant was mentioned which to quiet its cries was taken by its grandmother—an old colored woman—and suckled. This excited a flow of milk, which continued and afforded sustenance to the child until the time for weaning arrived.

Cases were referred to by *Drs. Kemp* and *Ashby* of male adults having largely developed mammae.

PROPHYLAXIS OF SMALL-POX.—*Dr. Ellis* after stating that he was now attending a case of small-pox asked for the best means of preventing its communication from the patient to others with whom he came in contact.

Dr. Taneyhill spoke of the method which he had employed in 1869. He always saw the patients after meals; he talked through a handkerchief whilst in the room, and he always changed all his woolen clothes in an adjoining room before entering that occupied by the patient.

CEREBRAL RHEUMATISM.—*Dr. Dickson* read a paper on this subject (published in this Journal, of March 1st). In answer to questions, *Dr. Dickson* said that quinine had not been given in large doses in his case, nor was there evidence of a special neurotic constitution in the patient. She had never been subject to neuralgia. There was slight amelioration of joint pain coincident with the cerebral involvement. It would not be possible in his opinion to diagnose cerebral rheumatism without accompanying joint involvement.

Dr. Cordell referred to the case of a negro girl to whom he was called. He found her tossing about on a pallet on the floor in extreme agony, and constantly crying out "oh! mother, my head! my head!" She had been attacked suddenly with the pain. She had fever but other symptoms were wanting. Cups were applied to the nape of her neck and some 4 to 6 ounces of blood were drawn. Relief began to be experienced as soon as the blood began to flow. A few hours afterwards acute rheumatism developed from which she suffered for several weeks (it was before the days of the salicylates), and in most if not all of her large joints. This patient had previously had acute rheumatism and her brother was crippled with the chronic form of the disease. Was this an incipient rheumatic meningitis cut short by blood-letting?

STATED MEETING HELD FEB. 27TH, 1882.

Christopher Johnston, M. D., President in the Chair.

The Association was called to order promptly at 8.30 P. M., 22 members present.

LABOR AT TERM; UNDEVELOPED FÆTUS, NORMAL PLACENTA.—*Dr. Ellis* reported the following: Mrs. H's menses ceased May 11th 1881. The following two months she had symptoms of pregnancy. Nothing further occurred of note until the middle of December, when she had a slight offensive vaginal discharge. This was followed by profuse hemorrhage and miscarriage. The fœtus was about 4 months developed, whilst the placenta was 7 inches in diameter and otherwise like the placenta at term. The cord was about 8 inches long and in a state similar to that of the fœtus. The specimens were exhibited.

DELIRIUM AND TINNITUS FROM SALICYLATES.—*Dr. Kemp* reported a

case in which buzzing in the ears and delirium followed the use of salicylate of sodium in 10 gr. doses every 4 hours. At the same time the temperature fell from 104° to 98° F.

EMOTIONAL INSANITY.—*Dr. Conrad* spoke of a form of insanity affecting the emotional areas alone. The subjects of it are perfectly intelligent and capable of transacting business, but are hypochondriac and weep over their lot. He believed them to be cases of emotional insanity. Why may we not have incoherence of emotions as well as of ideas and thoughts? These cases (of which he had seen several) are not usually classed as insane or sent to hospital.

Ferrier has shown intelligence areas to exist in the anterior portion of the brain distinct from the motor which occupy the middle part. So by exclusion he has established that the emotional areas are situated in the posterior part of the brain. Lewis has traced vaso-motor relations between the brain and liver showing that the idea of the ancients was not entirely incorrect. In the cases related there is as a rule a furred tongue, indigestion and torpidity of the bowel. In all there was heart implication. In some there was vaso-motor paralysis in others vaso-motor spasm. His attention had only recently been directed to these cases of which Charles Lamb and Samuel Johnson are to be regarded as examples.

Dr. Steuart referred to a notable case as an example of the affection spoken of by *Dr. Conrad*—that of a lawyer and judge of brilliant intellect who retired voluntarily from the bench and went to the hospital. There he spent his whole time in walking the floor, wringing his hands and talking to himself. He regarded himself as a most wretched human being. Yet he could be roused and then his intellect would be found as clear as ever. He was 12 or 13 years in the hospital finally dying of phthisis. The

validity of his will was admitted, the attending physician testifying as to his sanity.

INCORPORATION. — The committee reported that the association had been duly incorporated on the 20th inst. under the general laws of Maryland in accordance with the resolutions adopted to that effect by the association.

CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD MAR. 3, 1882.

I. E. ATKINSON, M. D., President, in the Chair.

(*Specially Reported for the Maryland Med. Journal*)

LARYNGEAL PHTHISIS.—*Dr. F. D. Arnold* opened the discussion of this subject. The diagnosis is now possible with the mirror alone in the great majority of cases. No case of undoubted primary laryngeal phthisis has been observed, yet the disease has often been recognized in the throat before it became appreciable in the lungs by physical signs. Tubercular disease of the larynx gives rise to few symptoms in its incipency, thus differing from ordinary inflammation. Previous to ulceration it occasions but little distress or impairment of function. Extreme anæmia of the mucous membrane is often the first evidence of the presence of the disease. This offers a striking contrast to the congestion of acute catarrh and specific inflammation. A small swelling arises at some point of the pale surface, extends slowly and finally breaks down into an irregular ulcer. More frequently in the first stage the mucous membrane presents the appearance of a chronic catarrh, with this difference, that all the structures in the larynx look thickened and give evidence of deep infiltration long before ulceration appears. The loose mucous and sub-mucous tissues of the arytenoids and ary-epiglottic folds readily admit

of infiltration. Hence their œdematous appearance is almost pathognomonic of laryngeal consumption. The late involvement of the epithelium shows that the disease originates within and extends towards the surface. Usually several of the different regions of the larynx are simultaneously attacked, and lose their epithelium in patches, producing a mouse-bibbled appearance, quite characteristic of the disease. The ulcer is of a grayish-white color and is usually shallow, only in the worst cases involving cartilage and muscle. Its most distinctive feature is the absence of all tendency towards repair, whereas in syphilitic ulceration, even in the absence of constitutional treatment, evidence of cicatrization can always be detected. A quasi-œdema is usually seen at the edges of the ulcers, especially when seated on the arytenoids or epiglottis. This is not simple œdema, since it fails to yield to treatment which is effective against the latter. The author had once seen scarification practiced in this condition, which produced an acute, serous œdema, necessitating tracheotomy three hours afterwards.

The favorite seat of the ulcer is the vocal cords, no doubt owing to their functional activity. An appearance almost pathognomonic is the constant presence of frothy mucus, covering the parts and interfering with their proper inspection.

Ulceration is succeeded by progressive aphonia, painful deglutition (owing to the contraction of the laryngeal muscles, which takes place in swallowing), a distressing paroxysmal cough and symptoms of pulmonary mischief.

Dr. A. next referred to the difference of views entertained by leading pathologists upon the subject of laryngeal phthisis. For instance, Rindfleisch asserts positively that tubercle is rarely, if ever, found in the larynx, whilst Virchow recommends this re-

gion as preferable to all others for the study of true tubercle. He considers these differences to imply a wide difference in the definition of the term tubercle.

The author regarded it as proven that tuberculosis of the larynx is always a secondary affection, arising not by contact with the secretion expelled from the lung, but through the lymphatics and sometimes the blood.

Of 1,226 post mortems of subjects who had died from pulmonary phthisis, Heintze found the larynx the seat of ulceration in 51.3 per cent; ulceration of the larynx was never present in tuberculosis of other organs when the lungs were intact. Of 50 patients with throat trouble who died with pulmonary consumption in 1876 Heintze found ulceration in 49, which in 83 per cent. was tuberculous, in 17 not. In the latter the ulcers were merely erosions, resembling the aphthous ulcer, such as is found in the throat in the exanthemata.

In reference to treatment, the most observable feature of the last decade is the greater tendency manifested to resort to sprays and vapors. There is no special treatment that can be reasonably expected to arrest or retard the disease. The relief of cough and painful deglutition by morphia, in vapor, spray or insufflation, and the use of the ice-bag and dilators as substitutes for tracheotomy in threatening dyspnoea, due to stenosis, form about all that can be done for the relief of the affection. None of the remedies that have been brought forward for the treatment of consumption have established their claim to the slightest curative value in the disease.

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STATED MEETING HELD MARCH 17TH,
1882.

PROLAPSE OF THE LARYNGEAL VENTRICLES WITH ILLUSTRATIVE CASES.—
This was the title of a paper read by

Dr. John N. Mackenzie. Cases of this rare lesion had been observed by Moxon, Morell Mackenzie, Lefferts, Waldenberg, Cohen and Ellsberg. Dr. Mackenzie gave the notes of two cases observed by himself at the clinic of Dr. Morell Mackenzie, of London.

1. A shopman, æt. 28, had long suffered from catarrh. Two years before he had contracted syphilis, and for the past 18 months had had hoarseness and sore throat. Six months before his voice had become suddenly gruff and hoarse, and had been growing worse ever since. He was now completely aphonic, with pain in swallowing, a fullness in the throat and dyspnoea on exertion. On laryngoscopic examination, the whole mucous membrane of the nares, pharynx, uvula and larynx, was found thickened and congested. A semi-elliptical mass, covered with mucous membrane, was found projecting from the right ventricle, filling completely its orifice and projecting towards the median line. This mass receded slightly within the ventricle on pressure. Respiration did not change the mass. The cervical glands were enlarged, and there was a syphilitic eruption on the face. Under local astringent treatment the laryngeal inflammation subsided greatly, and in a few weeks the voice was better. Operation being declined, the astringent treatment was continued, resulting, after four months, in a great diminution in the size of the tumor, which was converted into a flabby fold of membrane, which, during the act of speech, receded slightly into the ventricle.

2. A servant girl, æt. 22, with one child, of a consumptive family. Both herself and husband had had syphilis. She had also been subject to hoarseness and catarrh. One morning she awoke and found herself suddenly hoarse, with dyspnoea and a sensation of a foreign body in the throat. Aphonia increased with offensive breath and expectoration of pellets.

The nasal, pharyngeal and laryngeal membrane was congested and relaxed. Both ventricular bands were thickened. The left cord was obscured by a large pear-shaped body, filling the ventricle and bulging towards the median line. Respiration and phonation did not materially alter its appearance. It could not be returned within the ventricle. The laryngitis subsided considerably under topical astringent treatment for a month, but except slight shrinkage and a somewhat paler hue, the improvement was not otherwise marked. An operation being at this time proposed for the removal of the mass, the patient took fright and did not return again to the hospital.

The author concluded by some suggestions upon the pathology of the affection, which he traced to chronic inflammation. The diagnosis may be suspected on the sudden loss of voice in one subject to chronic catarrh of the respiratory passages, but cannot be positively determined without a laryngoscopic examination. The growth should be treated like any other laryngeal growth but the persistent use of astringents sometimes causes its retraction within the ventricular orifice.

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EDITORIAL.

THE NEW YORK STATE MEDICAL SOCIETY AND THE CODE OF ETHICS.—The late action of the New York State Medical Society in adopting a code of ethics at variance with that of the American Medical Association, hitherto the unquestioned authority in this country in all matters relating to professional intercourse, has, as was to be expected from its importance, excited much comment and criticism. It puts the society, of course, in a position of antagonism to the national body, an antagonism which can only be allayed by the yielding of one party or the other. That the National Association will yield to the

dictation of a subordinate society is not to be expected, and hence there remain but two alternatives—either the State Society must maintain itself in the attitude of defiance which it has assumed or it must retract and return to its allegiance.

The principal objectionable feature of the new code is that which allows of consultations with all "legally qualified practitioners of medicine," a term which, since the passage of the medical registration law, includes every species of quack, of what denomination soever or of no denomination. The proceeding is plainly revolutionary. The State Society has voluntarily placed itself in the attitude of rebellion against the authority of the National Body, and is doubtless prepared to take the consequences, whatever they may be. It evidently feels itself strong enough to throw off the shackles which have previously confined it, and to resign therewith such advantages as have accrued or may accrue from the connection. It cannot claim the *right* to act thus independently, since, by analogy at least, the right of secession in American legislative affairs has been settled, once for all, in the negative.

Much doubt must exist as to whether the physicians of New York desired the adoption of such measures. The few score who represented them on this occasion, whilst carrying with their votes the official weight of the Society, do not necessarily express the sentiments of a majority of the profession in the State. We know well how, under the influence of some persons of authority, measures are often passed in our medical meetings hastily and without due consideration. Whilst we are not prepared to speak of the sentiment in New York, we feel sure that it does not represent the sentiment of the profession in this latitude.

What advantage is to be gained by such a consorting with the hosts of irregularity? But one that we can see, and that unworthy of the sacrifice of principle—the acquisition of more consultation fees by the consultants in the large cities. Indeed, the charge has been made that the thing was gotten up by leading men in New York city in order to add in this way to their revenues. Whatever the motive with which

it was conceived and executed, we have the clearest conviction of its ill-advisedness and reprehensible character. It will not elevate the standing of the regular profession, whilst it will give credit and respectability to quackery and professional irregularity. Nor can the result, as we believe, be in doubt, since the American Medical Association, backed by all the other State Societies, will be able to maintain an attitude of firmness, and resist the encroachments of the ill-advised and unwarranted authors of such innovations. Encouraged by such support, the better-thinking men of the New York profession will probably band together to form another state society, in affiliation with the National Body and its branches and seeking to elevate rather than pull down the noble profession to which we all feel proud to belong.

THE HEALTH COMMISSIONERSHIP AGAIN.—The indifference manifested by the chief executive of Baltimore to the petition of the medical profession asking for the reappointment of the late able and acceptable Health Commissioner, Dr. James A. Steuart, suggests a very natural inquiry as to whether, as a body, we have any influence at all in the sanitary affairs of this community. To be told that we are "bulldozing" the authorities, when we are simply, in the interests of the citizens, seeking to retain in office one whom we believe the most competent, by character and acquirements, to fill it, shows a mind at least fertile in invention, if nothing more. That we were correct in our impressions of the status of affairs at the City Hall and of the all-powerful influence of political considerations in the appointment, has been amply shown by subsequent events.

There is only one way in which we can ever expect to obtain that recognition which is due to our intelligence and standing, and that is by being thoroughly united and harmonious. It cannot be supposed for a moment that six hundred citizens, forming the most highly cultivated and educated class in the community, should be altogether without a voice in the conduct of public affairs—except by their own neglect and indifference.

REVIEWS & BOOK NOTICES.

ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE. A Handbook for Students and Practitioners. By HENRY HARTSHORNE, A. M., M. D., Lately Prof. of Hygiene, in the Univ. of Penna., &c. 5th Ed. Phila., 1881, 8 vo. pp. 669, H. C. Lea's Son & Co.

Many physicians will recognize in this work an old and valued friend; one who proved a continual help in meeting the difficulties of early professional life. The last edition was published in 1874, and hence many changes were to be expected in this, to represent fairly the advances made during this busy interval. These changes are stated by the author to be as follows: "Several hundred brief additions have been made throughout the work; a number of new subjects have been written upon, especially in connection with the pathology of the nervous system; the illustrations have been considerably added to, and a large number of new and carefully selected formulæ for the administration of medicines have been introduced. An account is given, also, for the first time, of the method of prescribing according to the metrical system; and a section is added upon eye sight, its examination and correction." The author insists strenuously that the true guide in therapeutics is, and must always be, clinical observation and experience, and not researches carried on in the physiological and toxicological laboratory.

LECTURES ON ELECTRICITY IN ITS RELATIONS TO MEDICINE AND SURGERY. 2nd Edition. By A. D. ROCKWELL, A. M., M. D. Wm. Wood & Co., N. Y., 1881, 8 vo, pp. 122.

This work recommends itself as showing in a concise form the results of the experience of a well known and acknowledged authority in electrotherapeutics. This edition contains

descriptions of "Trouve's galvanic accumulator" used for storing electricity for surgical uses, and of Bell's "induction balance" designed to show the location of bullets in the body. It contains also a chapter upon "franklinic electricity," a subject in which interest has been so much revived of late. The work is copiously illustrated with various forms of apparatus. The modesty of the author's claims with respect to the power of electricity over disease will doubtless create a favorable impression in his behalf, since it proves that he is capable of treating with judicial impartiality a subject in which his special interest might be supposed liable to warp his judgment.

DRAINAGE FOR HEALTH, OR EASY LESSONS IN SANITARY SCIENCE. By JOS. WILSON, M. D., Med. Director U. S. N. Presley Blakiston, Phila. 1881, 8 vo. pp. 68.

This work discusses in a simple and agreeable way the subject of drainage and plumbing. It shows how country, meadow, valley, and marsh, farmhouse, village and city may be drained, how sewers should be constructed, how pollution of rivers may be avoided and how the waste of manufactories may be disposed of without detriment to health. It contains 65 illustrations, the frontispiece being that of "a gentleman of the malarious country visiting the city."

MISCELLANY.

PRE-CANCEROUS STAGE OF CANCER.—Mr. Jonathan Hutchinson enforces the doctrine of the local origin of most forms of external or surgical cancer and the paramount importance of early operation. "Too late! Too late!" is the sentence written but too legibly on three fourths of the cases of external cancer concerning which the operating surgeon is consulted. In most cases of cancer of the penis,

lip, tongue, skin, &c., there is a stage—often a long one—during which a condition of chronic inflammation only is present and upon this the cancerous process becomes engrafted. Phimosis and the consequent balanitis lead to cancer of the penis; the soot wart becomes cancer of the scrotum; the pipe sore becomes cancer of the lip; syphilitic leucoma of the tongue, which has existed in a quiet state for years, at length, in more advanced life, takes a cancerous growth. The frequency with which old syphilitic sores become cancerous is very remarkable; on the tongue in particular, cancer is almost always preceded by syphilis. A general acceptance of the belief that cancer has a pre-cancerous stage and that this stage is the one in which operations ought to be performed would save many hundreds of lives every year.—*British Medical Journal*, Jan. 7.

BALTIMORE ACADEMY OF MEDICINE.—At the annual meeting held March 7th the following officers were elected for the ensuing year: President, Dr. James Carey Thomas; Vice-President, Dr. Jas. A. Steuart; Rec. and Cor. Secretary, Dr. B. B. Browne; Reptg. Secretary, Dr. E. F. Cordell; Treasurer, Dr. G. L. Taneyhill; Executive Committee, Drs. Chisolm, Houck, and T. F. Murdoch. The Treasurer reported \$229 in the treasury, every member having paid his dues to date.

WRITER'S CRAMP.—M. Wolff, a German teacher of writing has shown great skill in the treatment of this affection. He came to Paris upon invitation of Prof. Charcot, and cured two very obstinate cases, one in 15, the other in 13 days. "He makes his patients execute movements in all directions with the affected hand for half an hour to an hour and a half at a time, three or four times a day; and in addition the muscles involved are stretched more or less forcibly three

or four hundred times daily. He also uses massage and friction and attaches considerable importance to percussing the affected muscles. The most essential part is the extension of the spasmodic muscles. He thinks if no improvement is apparent after five or six sittings the case should be abandoned."—*British Medical Journal*, Jan. 28.

BLISTER TREATMENT OF ACUTE RHEUMATISM.—*Dr. Herbert Davies*, in pointing out the unsatisfactory results of the salicylate treatment (*Lancet*, Feb. 11th), claims the following advantages for the blister treatment, deduced from the observation of 50 cases at the London Hospital:

1.—Blisters well and early applied (while fever is high and pain most acute) around every inflamed joint, and followed by large poultices to favor the discharge of large quantities of serum, produce rapid and full alleviation of the pain, reduce the pyrexia quickly, and speedily restore the use of the painful joints.

2.—The bold and free application of blisters around each inflamed joint restrains the tendency of the rheumatic virus to desert the limbs for the heart thus depriving this disease of its most dreaded result. In the London Hosp. Clin. Report I find the following statement: "In no case where the heart was sound at admission did any organic lesion subsequently develop itself, and in two cases in which soft but distinct mitral murmur was audible when the patient came under treatment, every trace of the sound rapidly disappeared as soon as a free and abundant serous discharge had been established."

3.—Relapses are slight in intensity and by no means frequent.

4.—The urine loses under this treatment its abnormal acidity without the internal use of any alkaline remedy, becoming often neutral and even alkaline.

5.—The time of the stay of the patients in the hospital was much less than six weeks—the old traditionary remedy for acute rheumatism. The average of my cases was 26 days.

FOREIGN VIEW OF OUR MEDICAL STATUS.—The progress in art, literature and science, that has been so marked a feature in the recent history of the U. S. of A., has only been surpassed by that made in medicine. Instead of depending, as formerly, on reprints of imported books for their literature the citizens of the U. S. have raised a literature of their own, and their medical and other works are now taking the highest places in all European schools. Their industry, fertility of invention, boldness of action, practicality, and perseverance in patient scientific investigation, have enabled the medical men of America to advance our knowledge of the healing art by rapid strides. With them there has been none of the paralysis so deplored in some of the older schools as affecting all scientific pursuits, including medicine, and which has been so clearly traced to the attempt to reduce intellectual operations to the uniformity that constitutes the perfection of a military drill. Their institutions enjoy freedom of action, and they are determined to maintain it. In 1861, there were 37 medical schools or colleges in the U. S., each separate and independent of the other, and each having the power to confer medical degrees. Very possibly there may now be more, for the power to confer degrees is granted to all organized bodies seeking it. They allow the law of supply and demand to regulate the growth, and exclude all interference, governmental or other that might hinder free development and successful progress.—*G. H. Kidd, M. D., F. R. C. S. I., Dublin, in British Medical Journal*.

DEATH AFTER OVARIOTOMY DUE TO PREVIOUS TAPPING.—Mr. Lawson Tait drew attention to the fact that amongst the last 100 ovariectomies (for cystoma) which he had performed there had been only three deaths. In all the deaths had been due to the formation of a firm white clot, which started from the point of ligature of the pedicle and slowly traversed the venous system until it reached the heart, death ensuing in from 30 to 40 hours after operation. The symptoms which preceded death were swelling of the legs, rapid rise of pulse and its disappearance from the extremities some time before death; breathlessness, ending in suffocation and slight delirium. He had seen several such deaths, but not one in a patient who had not been previously tapped. His explanation was that the repeated tapplings deprived the blood of some element or elements included in the infinite variety of albuminous substances found in ovarian cysts, the deficiency of which predisposed to coagulation of the blood. The author thought that no case of ovarian tumor should be tapped till previous abdominal section had shown that it could not be removed. He believed if this rule was followed the mortality might be reduced to less than one per cent., if cases were operated on early; as long as the clamp gave a mortality of 25 per cent. it was right to stave off by all possible means so fatal an operation as ovariectomy.—*Midland Medical Society, Lancet, Feb. 18.*

POISONING BY ACONITE.—Dr. E. T. Reichert (*Phil. Med. Times*) gives an analysis of the treatment of forty-one cases of aconite poisoning. Evacuation of the stomach, the administration of large doses of stimulants, and the use of external stimuli, was the system of treatment pursued in the majority of cases. Opium and its preparations were used in four cases, all of which terminated favorably. In one case $5\frac{1}{2}$ drachms of laudanum were administered in four hours without causing narcotism. Digitalis was administered in two cases in connection with other stimulants. One died and one recovered. The latter, who had taken an ounce of Fleming's tincture, received three hypodermic injections,

each of twenty minims, of tincture of digitalis within an hour. Amyl-nitrite was used with very marked results in one case, and certainly deserves an extended trial, as it is a marked cardiac stimulant. Tincture of nux vomica was used in one case with marked benefit to heart and respiration.—*British Medical Journal, Jan. 7.*

REQUISITES FOR GOOD SEWERAGE.—The *Sanitary Engineer* (February 23) considers that good sewerage is only to be secured in a large city by the observance of the following rules:

1st. Place the whole subject of design in the hands of a civil engineer who realizes the requirements of sewer channels, which are, impermeability, smoothness, concentration of flow, directness of line and grade and perfect ventilation.

2d. Place the whole work of construction in the hands of a civil engineer, who has had experience in the handling of men and materials, who knows what good work is, and dares to require it from contractors and workmen. Make these men responsible for the character of the work done. Give them absolute power of discharge of poor workmen, and condemnation of poor material. If they are shrewd politicians so much the better. A good manager of men who is honest is more effective than an obstinate man who looks upon a politician as an incarnation of evil and considers abhorrence of vice to be the chief of the virtues.

3d. Supervise the sewers after they are built by a corps of intelligent men under intelligent control. See that the catch basins are regularly and frequently emptied, the ventilators kept clean, and the sewers kept free from deposit. A small force of men will be competent for this purpose.

FEMALE PHYSICIANS ABROAD.—It has been stated that there are now nearly 400 female physicians in prac-

tice in the United States. They are to be found in twenty-six of the States of the Union, but the majority of them are practicing in New York, Massachusetts and Pennsylvania. In Russia twelve women-doctors are officially engaged in teaching medicine to female students. Several are in the service of the Zemstvos, and some forty are engaged in hospitals. It is also reported that twenty-five qualified female practitioners, who served in the military operations of 1877, have, by order of the Emperor, been decorated with the Order of St. Stanislaus of the Third Class.—*Med. Press and Circular*.

HOSPITAL FOR THE WOMEN OF MARYLAND OF THE CITY OF BALTIMORE.—This is the title of the new woman's hospital, whose advent has been so much discussed of late, both in professional and lay circles. It is an "institution started and to be conducted purely in the interest of charity for that class of suffering women who are unable to pay for the best professional services. It will know no creed, sect, or individual save the individual who may best serve its charitable interest." Drs. William T. Howard and H. P. C. Wilson will be the surgeons in charge, and Drs. Charles H. Riley, Robert T. Wilson, William P. Chunn and Charles O'Donovan, Jr., will be the assistant surgeons. There will also be a corps of consulting surgeons and physicians, composed of prominent gentlemen. The location of the hospital has not yet been definitely determined.

LARGE BRAIN AND SKULL.—*Dr. Christopher Tompkins*, of Richmond (*Trans. Va. Med. Soc.*, 1881) reports the autopsy of a negro man, apparently a pure black, aet. 32, twice a murderer and twice an inmate of the Central Lunatic Asylum, of Virginia, the first time for some months, the last time for nine years, terminating

with his death. He was 6 feet 2 inches in height, of spare build, and died of rapid consumption. The brain weighed 70 ounces 2 hours after death. Its substance appeared to be healthy, as also its membranes and the bones of the skull. The dimensions of the skull were: Antero posterior diameter, $8\frac{3}{4}$ inches; transverse diameter, $6\frac{3}{8}$ inches; vertical diameter, 6 inches; its weight was 3 pounds. The capacity of the cranium was equivalent to the bulk of over a pound more of clover seed than that of two typical skulls of a negro and Caucasian respectively, selected from a collection of 54, with a view to comparison. The excess was situated, however, chiefly in the posterior segment of the skull. This subject, when sane, was characterized by stupidity; during his insanity he was a violent masturbator. It was estimated that, if the brain had been weighed immediately on its removal, and with membranes entire, it would have weighed 72 ounces.

HYPOPHOSPHITES OF LIME AND SODA IN CARCINOMA.—*Dr. Hunter McGuire*, of Richmond (*Trans. Va. Med. Soc.*, 1881) gives these agents to every patient upon whom he operates for carcinoma of the breast, and is satisfied from a ten years' experience, that the return of the disease, has, in some cases been delayed and in others altogether prevented by their use. They seem to be only useful in scirrhus. He relates a number of very striking cases. His formula is R. Hypophosphites of lime and soda \mathfrak{zss} ., dilute phosphoric acid \mathfrak{zss} ., distilled water \mathfrak{zvi} . M. S. Teaspoonsful in water thrice daily. Sometimes he adds to this half an ounce of muriated tincture of iron or half a drachm of liquor chlorin. arsenici, or both.

EX-PRESIDENTS' PRIZE.—The ex-Presidents of the Virginia Medical Society offer two annual prizes, each

a gold medal or \$50 in money, for two essays on a selected medical and surgical subject respectively. Competition is open to all the members of the society. The subjects this year will be "Alcohol; Its Use and Effects as a Beverage and Medicine;" and "Recent Progress in Abdominal Surgery."

PARKE, DAVIS & Co.—Attention is directed to the advertisement of this well-known firm to be found on page vi of the present number of this Journal. The principle involved in the trade-mark fight is an important one to the practitioner of medicine and it is right that both sides should be heard. This firm offers to send to any address free of charge printed matter bearing upon both sides of the subject. While we have no interest in the personal points at issue we cannot but think the position of the firm is misunderstood and has been grossly misrepresented.

CONTAGION CARRIED BY DOMESTIC ANIMALS.—Dr. Hewitt (*Journal of Compar. Med.*) reports an outbreak of diphtheria transmitted by a cat. He had noticed for some days that the cat had some swelling of the glands of the neck, and after a little time it died. The same day, diphtheria of a malignant type showed itself in the family. Two or three children died. Dr. Hewitt himself had a narrow escape, and a serious epidemic followed in the neighborhood.—*London Medical Record*, March 15.

SOCIETY BULLETIN.—*Med. and Chir. Faculty of Md.* will hold its Annual Session in Baltimore, commencing Tuesday, April 11th, at 12 M. *Acad. of Med.* will meet Tuesday, April 4th, at 8.30 P. M. Dr. H. P. C. Wilson will open the discussion of "Tents in Gynecological Practice." *Med. Ass'n* will meet Monday, April 10th, at 8.30 P. M. Dr. W. F. A.

Kemp will open the discussion "On Some Effects of the Rheumatic Diathesis." *Med. and Surg. Soc.* meets every Wednesday, at 8.30 P. M. *Clin. Soc. of Md.* will meet Friday, April 7th, 8 P. M. Dr. Bevan will read a paper. Dr. Michael will report a case of "Cancer of Pylorus with Secondary Deposits in Other Organs."

MEDICAL ITEMS.

PROF. J. F. SOUTH, the translator and annotator of Chelius' System of Surgery died in London Jan. 8th, aged 84.—Dr. Barth of Paris recommends the hypodermic injection of ether (about 5ii daily) when all other remedies have failed, in adynamic pneumonia, and other affections with a typhoidal tendency.—Dumontpallier (*Société de Biologie*) asserted that he could make certain muscles contract in a patient in his service—when hypnotized and prepared for experiment by the application of a silver brass plate on the left side of the forehead—by simply looking at the muscle. The effect is due he claims to an "ocular influx."—Sir Robert Christison, Bart., of Edinburgh, died Jan. 23, aet. 84. He was Professor of Materia Medica in Edinburgh Univ. from 1832 to 1877, having previously held the chair of Medical Jurisprudence. An edition of his "Treatise on Poisons" was published in Baltimore many years ago by Professor Ducatel of the Univ. of Md.—The possibility of carrying infection by means of clinical thermometers and stethoscopes has been the theme of some communications in recent numbers of the *Lancet*.—The library of the late Prof. Jas. P. White has been donated to the Buffalo Medical College.—The Paris Académie des Sciences has conferred on Brown-

Sequard the grand Prix Lacaze, \$2,000; it is given only in recognition of a life long devotion to physiological science which has resulted in important discoveries. The previous recipients were Chauveau, Marey, and Dareste.=Sir Erasmus Wilson has given \$50,000 to the University of Aberdeen to endow a chair of Pathological Anatomy. The incumbent will receive the annual revenue of this sum and the fees as salary and will not be allowed to engage in private practice.=Sir James Paget has returned to London in excellent health and has resumed his professional duties.=Prof. Brown-Sequard has declined the position of Court Physician at Madrid.=The order of the Cross and Collar of Knight Commander of the Crown of Italy has been conferred on Sir Wm. MacCormac by King Humbert.=Whenever a birth is registered in Brussels the parents receive a little pamphlet containing short and plain directions for the management of children.=The ear of "corn" which made its way out of the lungs and chest near the shoulder turns out now to have been an ear of "wheat."=Professor Panum of Copenhagen, has been appointed to preside over the next International Congress.=Pirogoff died of epithelial cancer which perforated the hard palate.=Four deaths from chloroform, 3 in England and 1 in Germany, are reported in a recent number of the *British Medical Journal*.=Gray's Anatomy has been translated into Chinese, making six volumes.=Chas. Orton, M. D., Dur., F. R. C. P. E., finds a solution of salicylate of soda applied to the joints in acute rheumatism, on lint under oil-silk, to give great and speedy relief to the pain.=Drs. Richard H. Thomas and John G. Jay have been elected Professors in the Woman's Medical College of Baltimore.=152 women have been admitted to the practice of medicine in Russia within the last ten years.=

Professor Hayem has succeeded Professor Charcot in the Chair of Path. Anatomy, recently vacated by the latter.=The Obstetrical Society of London granted diplomas to 39 midwives during the last year.=Dr. Fenger, of Chicago, has successfully removed the uterus through the vagina.=M. Lucas Championniere has been making an investigation into the chloroform furnished in Paris, and finds that a pure article is not to be found in that city.=1,638 of the students of the University of Edinburgh, or about 50 per cent. of the whole number, are students of medicine.=The expenses of the library of the New York Hospital for the last year were \$3,203.=Dr. L. P. Gray, of the New York State Lunatic Asylum, nearly lost his life a few days ago, by being shot through both cheeks by a lunatic.=Both Freund's and Porro's operations have, according to the *British Medical Journal*, been repeatedly performed in England in the last three months. Of these cases but two, those of MacCormac and Spencer Wells, have been successful. The exact number of unsuccessful cases is unknown, but the same authority is cognizant of five in London alone, all by well-known and experienced operators.--Freund's operation, as is known, consists of removal of the entire uterus, either by the vagina or through an abdominal incision; Porro's in the removal of all except the cervical portion.=The Clinical Society of London has 341 members. It has about \$2,500 invested.=Tubes containing culture fluids obtained from subjects suffering from yellow fever have been received at the path. laboratory of the Paris Faculty of Medicine. The microscope reveals the presence of very numerous microphytes. Cultivations with the liquids have succeeded perfectly, and inoculations are being made.=The curse of the world is its idlers awaiting opportunity. C. B. White.

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ORIGINAL COMMUNICATIONS.

ORIGINAL PAPERS.

CREMATION vs. BURIAL.

BY JUDSON GILMAN M. D., OF BALTIMORE.

(A paper read before Balto. Med. Association, March 13th, 1882.)

The subject of the disposition of the body after death is one that is, more and more, year by year, claiming the attention of an intelligent community, and especially of sanitarians.

To preserve the bodies of our deceased friends, not from decomposition and decay, for that is impracticable, but from desecration by wild beasts, the vulture or the reptile, various means have been resorted to. Concealing in a cave with the mouth securely closed, embalming and placing in some secure place, or burying beneath the earth's surface in soil, wood, stone or metal, or in water, seem to be the only means used to delay, never to prevent, the inevitable change. Cremation, or incineration, furnishes a far more satisfactory resolution of the body, at once, to its original elements, thereby hastening

only the work which nature is more slowly accomplishing; after the purifying process of burning, the ashes may be deposited in consecrated urns and placed in some appropriate receptacle, or, like the Penates of the ancient Romans, in the penetralia, the sacred places of our homes.

"Bury the dead out of my sight" would not then be the cry of universal man, but, purified by the refining influence of fire, the remains would no longer be repulsive to our sensibilities or disgusting to our sight.

In the classic age of refined and polished Greece and Rome, where science, art and civilization had attained to their highest eminence, the coarse and vulgar habit of depositing in the earth, to putrefaction and the consuming worm, so that the very thought, much more the sight of the remains of the loved one, becomes a matter of disgust and repulsion, was substituted by the more sentimental and refined habit of incineration.

The subject of the disposition of the dead must be considered under two or three aspects: *First*, in a sanitary point of view, or what is best for

the community. *Second*, in a sentimental, or an affectionate memory of the deceased, and *Third*, as an economical measure.

In considering this subject, we take it for granted that the dead body itself is in no way personally interested in its disposition, having passed beyond the realm of consciousness.

As a *Sanitary* measure then, no intelligent person, I apprehend, will in this enlightened age and day attempt to deny the infinite superiority of cremation as compared with burial in the earth, either mural or otherwise.

In the rural districts of our country, or wherever population is sparse, the danger is of course comparatively slight, but as cities increase, and encroach upon the burial grounds which were once in the suburbs, or beyond its confines, other cemeteries must be provided, and these in turn must give way to public progress and improvements, so that the earth in and around a large city soon becomes saturated with decomposing animal matter, polluting its circulating fluid and thereby the water which we drink, and poisoning the air with the gases which emanate therefrom. Thousands of human lives have already, doubtless, been cut short by this poison of slowly decaying and often diseased animal matter, sometimes the noblest and most valuable, by the putrefaction of the meanest and most worthless. The grave-yard pollution of air and water has found many a victim, especially in times of pestilence, in the social circles of the highest and the best. This terrible result does not come upon us at once, nor perhaps in our generation (except in special cases), but if the present custom is persisted in, it is sure to come to our children, or our children's children, in fearful mortality.

All this danger may be averted by adopting the custom which is every year increasing in popularity, viz., of rapidly reducing the body to its elements by fire.

As to the *Sentimental* aspect of incineration:

Custom alone has educated us to submit to the soul-harrowing spectacle of consigning the bodies of our loved ones to the dark, damp prison-house of the grave. At such a time all the sensibilities of our nature are aroused, and when the clods of earth are thrown upon the coffin, how almost universally do we hear the sobs of friends who stand around the open grave. And then the thought of leaving them alone, buried in the cold earth, to putrefaction and the worm, is like the refinement of cruelty to the bodies of those whom we have so fondly loved and cherished. And when, in after days, and we think of them as in a state of putrefaction so repulsive, that were the opportunity given we should not dare to look upon their once loved forms and faces.

How different all this when cremation is substituted for burying. We then carry in our memories the purity of the face and the form of our departed loved ones, and by this rapid resolution of the body to its original elements, we eliminate and dissipate almost the entire body in ethereal gases, which, rising toward heaven, suggest a brighter and a spiritual life above. And when, in after days and years, we think of them, our thoughts do not descend to the charnel house; but, while their purified ashes remain with us, following the etherealised body as it ascended, we seek for them in that spirit land, where death never enters and where corruption is unknown.

And now a single word as to the *Economy* of cremation, as compared to that of burial.

No one can fail to see that custom almost *requires* an extravagant expenditure of money in floral decorations, in elaborate coffins, in funereal display and in monumental adornments, which many, and in fact *most* persons

are illy able to bear, and which impose a heavy burden upon the living, causing them oftentimes to make grievous sacrifices for the unconscious dead.

In striking contrast to all this is the simple and beautiful rite of etherealising the body by fire, reducing it in a few hours to its original elements, and so purifying its remains, at a trifling expense, that they may be borne to our homes or placed in some appropriate receptacle.

A SHORT NOTE ON PRIAPISM.

BY OSCAR J. COSKERY, M. D.,

Professor of Surgery, College of Physicians and Surgeons.

(Read before the Medical and Surgical Society of Baltimore, March 14th, 1882.)

Whether it is that the subject of priapism is so small an one in the opinion of the majority of authors as not to call for an extended notice at their hands, or whether it is that with that innate *modesty* that all who "rush into print," especially medical, possess, certain it is that scant reference to it is made, more particularly as to its peculiarities, and as a surgical symptom. In the last edition of Dunglison's Dictionary priapism is defined thus: "Constant and distressing erection, with or without any voluptuous idea or desire for venery." However well this description may fit the condition, as it is said to be produced by a genital excitant, as by cantharides for example, I do not know; but, that it is *not* the condition so often found after injury to the spine, I *do* know.

Before proceeding further in the discussion of the subject, it would, perhaps, be well to describe the state of the penis in the priapismus condition, as we understand it, especially after surgical injury. And I would start out by saying that priapism from this cause is not *erection*, as we understand the term *erection*. It is truly a *stiffness* of the penis, but not one of

true *erection*. As the latter word is used it means a state in which the organ acquires "length, breadth, thickness" (by means to be hereafter alluded to), and its position is thus changed from the downward, hanging, flabby state, to that in which the glans penis looks upwards and forwards, and the body of the organ lies, more or less, parallel with the horizontal axis of the body. In priapism, the penis, while it leaves the normal downward position, never, in my experience, passes beyond the perpendicular to the long axis of the body, and stands out at right angles to short plane. Again, while a certain amount of *stiffness* of the organ is present this does not amount to rigidity, and while it, like Banquo's ghost, "will not down" alone, a very slight pressure will cause it to assume its normally drooping position, from which, however it immediately returns to the perpendicular, when pressure is removed. Moreover the penis does not necessarily acquire length and breadth in priapism as it does in true *erection*. In one case that was under my charge, the organ, while in the true condition of priapism, so long as the patient lived, only measured one inch in length, and after death this increased to two inches and one-half as the penis became flabby.

I would deduce from the cases I have seen of priapism dependent upon injury to the cervical spine (the condition with which we find it most commonly conjoined), that it (priapism) is not erection of the penis as we understand the word *erection*, or the state in which the organ is capable of intromission, and, as far as my own experience goes, the patients have been too badly injured to show any tendency to "voluptuous ideas or desire for venery."

Why priapism occurs in such cases as I have alluded to above—injury, as by fracture of the spine—is a disputed point. In my own experience this

state has only been found where the upper cervical region has been the site of fracture, and I have twice diagnosed fracture between the second and fifth cervical vertebræ from this symptom. The diagnosis was verified in both instances. While not doubting the statement, long ago made, that priapism may accompany fracture of any portion of the spine, I still think it probable that secondary lesion of this particular small portion of the cervical region would, if looked carefully for, be found. Whether this is due to irritation of the generation function centre possibly located here, or, as believed by Dr. Wm. Hunt of Philadelphia, to injury to the sympathetic ganglia or nerves in that region, is beyond the province of this "short note." Let the fact suffice.

Before closing these few remarks upon the subject, I will allude to two cases of what may be called priapism partial or complete. A colored man was struck by a heavy piece of wood upon the dorsum of the penis just at the root. Pain and swelling came on at once, persisting until I saw him three days afterwards. On inspection the organ was plainly distended, large, long, stiff and elastic to the touch, and, to appearances was fully competent to perform its functions, except that it had a downward hang-dog droop, and would not "up" beyond forty-five degrees.

The second case was that of a white man, a wood-carter; in throwing a stick of cord-wood upon his cart, the piece struck one of the chains and rebounding with force struck him also upon the *dorsum penis* but one-third forward of its total length. A wound was produced through which bleeding took place to fainting of the patient. The surgeon called was obliged to ligate the bleeding vessel. When I saw the patient, three weeks after the accident, the penis presented rather a funny appearance. It reminded me rather of the

relationship of the head of the common snapper-turtle to the neck. At the point where the scar showed that the injury had been received, and posterior to this the organ had the normal size and shape. But anteriorly to this spot the penis was swollen, elastic, congested, and to an extent irregular in shape—looking much like the snapper's head.

Both patients ultimately recovered. The injury, I believe, produced in both of these cases the same condition—*plastic phlebitis*—and as the collateral veins enlarged, and as absorption of the plastic deposit in the injured *dorsalis penis vein* went on, a restoration to the former condition was reached. These cases, I think, seem to show that what may truly be called priapism may depend upon different causes.

THE INFLUENCE OF VARIATIONS OF ARTERIAL PRESSURE, OF VENOUS PRESSURE AND OF TEMPERATURE UPON THE PULSE RATE OF THE ISOLATED MAMMALIAN HEART.

BY H. NEWELL MARTIN, M. D., D. SC.,
M. A.,

Professor of Biology in the Johns Hopkins University.

(Abstract* of a Paper read before the Med. and Chir. Faculty of Md., April 14th, 1882.)

The speaker commenced by referring to the communication made by him last year to the Medical and Chirurgical Faculty, in which he had shown that it was possible to separate a dog's heart physiologically from all parts of the body of the animal but its lungs, and in this condition keep it alive for hours, and available for study.

Since then the method of work has been greatly improved. As now carried out it is as follows: A dog having been chloroformed, curarized, or placed under the influence of morphia is tracheotom-

*This abstract was made by the author.

ized; then the common carotids are exposed in the neck, ligated and a cannula placed in the cardiac end of each vessel. Artificial respiration being started the thorax is opened and both subclavians tied. Next a wide cannula is inserted into the aorta just beyond its arch. After these procedures have been completed the coronary arteries of the heart are the only arteries of the systemic circulation which remain open. Brain, spinal cord, trunk and limbs are no longer supplied with blood and at once commence to die. The next steps are to ligate the inferior cava just above the diaphragm, the vena azygos near its junction with the superior cava and the latter vein below the point where the left innominate vein joins it. All systemic veins are thus closed except the coronary veins and the other small twigs from the heart itself opening into the right auricle. The pulmonary circulation is not interfered with at all. Heart and lungs are now the only parts of the body through which any circulation takes place.

A large cannula is now tied into the cardiac stump of the superior cava; this cannula is connected with a reservoir of (a) defibrinated dog's blood, (b) the same diluted with some 0.7 per cent. solution of pure sodium chloride in distilled water, or (c) with defibrinated calf's blood. The carotid cannulas being opened the blood in the heart and lungs (which would be apt to clot in a prolonged experiment) is washed out and replaced by defibrinated blood supplied from the reservoir connected with the superior cava. While this washing out is taking place a thermometer is introduced into the left subclavian and its bulb pushed down into the aortic arch: in this position the thermometer is firmly tied; it serves to give subsequently the temperature of the blood pumped by the left ventricle into the aorta and hence that of the blood circulating in the coronary arteries of the heart. The animal with its heart and lungs completely isolated in this manner is now transferred to a warm moist chamber kept at a temperature of about 38° C. The cannula in the superior cava is connected with a Marriott's flask filled with warm defibrinated blood (dog's, dog's diluted with sodium chloride solution or calf's) about

four litres, and with this the heart is fed. Alongside this Marriott's flask is another quite like it, but empty. The wide aortic cannula is attached to a long rubber tube which extends through the roof of the moist chamber and whose distal end can be raised or lowered at will. These connections having been made, all clamps are removed and the heart taking blood from the full Marriott's flask under a known pressure, pumps it out by the tube connected with the aorta. This tube pours it into a funnel from which it is conducted to the empty Marriott's flask. As one supply flask empties the other fills and at the proper time, by turning a couple of stop cocks the first flask is disconnected from the heart, and the other used to feed it; while the blood pumped out from the tube in the aorta is now diverted into the flask at first full but now empty. So on, from time to time during an experiment, as often as necessary, each of the two Marriott's flasks is made in turn feeding vessel and receiving vessel for the blood pumped round by the heart. Uniform artificial respiration is maintained by a small water engine. The carotid cannulas are connected with manometers which record pulse rate and arterial pressure on the paper of a kymograph. Under these conditions we can vary at will venous pressure or temperature, while keeping all other conditions affecting the heart constant. Raising the exit point of the tube in the aorta raises arterial pressure; raising the level of the supplying Marriott's flask raises venous pressure: and keeping these two constant we can warm or cool at will the blood circulating in the cardiac capillaries, and accurately learn its temperature by the thermometer whose bulb lies in the aortic arch.

Professor Martin then proceeded to give an account of his experiments in three cases, (1) in which aortic pressure was alone varied, venous pressure and temperature being kept constant; (2) in which venous pressure was alone varied, aortic pressure and temperature being kept constant; (3) in which temperature was alone varied, venous and aortic blood pressure being kept constant.

In reference to aortic pressure he gave a brief sketch of the very inconsistent

results obtained by previous workers most of them well known and justly esteemed as competent and accurate experimenters. Since such honored physiologists, as Marey, Ludwig, Haidenhain, Nawrocki, Von Bezold and Tschirjew had reached absolutely contradictory results as to influence of variations of arterial pressure upon the rate of beat of the heart it was clear that some kind of error was involved in their methods of work. A careful consideration of their methods showed this source of error: all had worked at the problem under conditions in which either the heart was not set free from the influence of extrinsic nerve-centres, or under which other things (more especially the temperature of the blood circulating in the coronary system) were altered in addition to arterial pressure. Whenever a change in the pulse rate was found it was attributed solely to the alteration of arterial pressure, all the other concomitants of this alteration being quite neglected. The errors which had thus crept in were illustrated by a critical analysis of the work of Marey and Von Bezold, the speaker referring to the latter as a physiologist whose untimely death had ended a career of the greatest promise for the elucidation of cardiac physiology.

Professor Martin then proceeded to describe his own work on this point. The isolated dog's heart being supplied with blood of constant composition and known temperature and under a constant venous pressure from a Mariott's flask, artificial pressure was raised and lowered rapidly between the limits of 40 and 210 millimetres of mercury, by elevating and lowering the level of the opening through which the tube connected with the aorta pumped out the blood poured into it by the left ventricle. No observation was made until the animal had been at least half an hour in the warm chamber, by which time it was certain that brain and spinal cord, deprived of blood for that period, were absolutely dead; and the rigor of the muscles of trunk and limbs, almost always very marked by that time, proved conclusively that all the body of the animal except heart and lungs, through which alone blood was flowing, was a dead, inert mass; by the ligature of

the systemic arteries and veins above described, it was, at any rate, thrown entirely out of any possible connection with the heart.

The experiments, which were illustrated by charts giving curves which showed arterial pressure and pulse rate during their execution, proved decisively that variations of arterial pressure within those limits had no direct effect whatever upon the rate of beat of the heart. The average carotid pressure in dogs of the size used is 110-120 millimetres of mercury, so that the limits above mentioned include, on the one hand a pressure very nearly double the normal and on the other one less than half the normal. Certain still higher pressures, produced not merely by raising the exit of the outflow tube, but by narrowing it also, do affect the heart's beat, but the author had not yet had opportunity to fully investigate this part of the question; which has special interest, as the conditions thus produced probably represent very closely those in the heart during a paroxysm of angina pectoris.

Professor Martin next described his experiments made on the isolated heart, exposed to variations of venous pressure, arterial resistance, and temperature being kept constant. The pressure under which blood was sent into the right auricle varied from that exerted by a column of defibrinated blood 7 centimetres in height to that due to a column of blood 38 centimetres in height. These variations were, of course, produced by raising or lowering the Mariott's flask connected with the right auricle. The results, which were expressed in a chart constructed from the tables of pulse rate and venous pressure, showed conclusively that changes in the latter had no direct influence on the rate of the heart beat.

Incidentally the speaker referred to the fact that a series of experiments now being carried on in his laboratory in which not the pulse-rate but the *work* done by the isolated heart under varying conditions was the subject of investigation, had proved that changes in venous pressure had a great influence upon the amount of blood pumped out by the left ventricle in a given time; thus

confirming for the mammal what Roy had shown for the frog that it is pressure in the great veins and right auricles which mainly controls the amount of work done by the heart.

Professor Martin next proceeded to describe a third series of experiments in which venous pressure and arterial pressure were kept constant, and the temperature of the blood sent through the isolated heart alone was varied. The temperature was measured by the thermometer in the aortic arch, and so was that of the blood flowing through the coronary arteries.

It had been already known that temperature changes very greatly influence the rate of beat of the isolated hearts of cold-blooded animals. From the slower beat of the heart of warm-blooded animals while hibernating and the quicker pulse of artificially warmed animals, as also the quick pulse of fever it has been assumed that this also was true of the mammalian heart. But so long as the heart is in physiological connection, through nerves and blood current with other parts of the body, such a belief is merely probably correct—its validity is not proven.

In the case of fever, for example, we now have much reason to believe that the dry skin and high temperature are both the results of nervous disturbances by which the temperature regulating mechanism is thrown out of working order. It might well be, therefore, that the quick pulse also was due to nerve changes extraneous to the heart—such as paralysis of the cardio-inhibitory centre, or excitation of the cardio-accelerator centre or both. This is, moreover, a case where experiments on cold-blood animals are least reliable, as bases of argument for mammalian physiology. Deductions made from the heart of the frog, an animal with no heat regulating mechanism, and never showing true fever can only be applied with great reservation to the heart of the mammal. It is nevertheless of supreme importance to know just what does cause the quick pulse of the febrile state; one of whose dangers is that the overworked heart will give out before the fever has terminated. If the rapid pulse

rate be determined by extrinsic nerve influences, or by poisons produced through abnormal nutritional conditions in various organs, and conveyed to the heart in the blood, we cannot *a priori* say that cooling the patient will slow its rhythm and ease the heart. But if it be proved that in an isolated mammalian kept under conditions where all but the temperature of the blood flowing through it is unvaried, hotter blood causes quicker pulse and *vice versa*, we have a valuable indication that cooling of the patient as by carefully applied baths may save life in cases of fever where death is threatened by failure of the heart.

Professor Martin exhibited a chart illustrating by curves pulse rate and temperature during one experiment. Beginning with blood at 37°C this was gradually cooled to 30°C and then slowly warmed again. It was seen that every fall in temperature was accurately accompanied by a slowing of the pulse and every rise of temperature by a hastening of it.

Further experiment will be needed to decide whether anything else comes in as a factor in producing the febrile pulse-rate, but the experiments make it very clear that the chief factor is a direct action upon the heart itself of the hotter blood flowing through its vessels.

The interesting questions, what is the highest temperature, and what the lowest temperature at which a dog's heart will still beat are now under investigation.

In conclusion, Professor Martin said that the improvements in this method of studying the mammalian heart since he had laid a short account of it before the Faculty twelve months before were largely made by his pupils; he hardly now knew what part of the method was his own and what the device of some one or other of them. As it now stands, the process which promises so much in the elucidation of points in cardiac physiology, was not that of any one individual, but of the coöperation of several workers. In so far as it had any merits, it should go forth to the world as the "Baltimore Method."

SOCIETY REPORTS.

EIGHTY-FOURTH ANNUAL SESSION OF THE MEDICAL AND CHIRURGICAL FACUL- TY OF MARYLAND.

HELD IN THE CITY OF BALTIMORE FROM
APRIL 11TH TO 15TH, 1882.

(Specially reported for the *Maryland Medical Journal*).

The Eighty-fourth Annual Session of the "Medical and Chirurgical Faculty of the State of Maryland" convened in Hopkins Hall, Johns Hopkins University, Baltimore, on Tuesday, April 11th, 1882. The Society was called to order at 12 m. by the President, *Dr. Frank Donaldson*, 60 members and delegates from the city and different sections of the State answering to their names on the call of the roll.

The President then delivered his Annual Address.

PRESIDENT'S ADDRESS.

He welcomed the visiting members and delegates to Baltimore, urging the importance of coöperation in the work of the Faculty upon the part of country members and of efforts to increase the number of county societies. He referred to the favorable reception accorded to the last annual Transactions, especially to the papers of Drs. Martin & Sedgwick which were alone a strong argument in favor of vivisection. He proposed the creation of a new section on Biology and of prizes for original research in this department. He thought the time was fast approaching when a knowledge of Biology will be considered an essential part of medical education. In referring to the necessity of a Library, he said that medical men must always be students unless they would drift to the rear. He proposed a large voluntary subscription in ad-

dition to the amount annually appropriated from the revenues of the Faculty for this purpose. Alluding to the Code of Ethics recently adopted by the Medical Society of New York he said that it was irreconcilable with common sense and honesty; that intelligent consultations were not possible between scientific physicians and homœopaths, Thomsonians, eclectics and other irregulars. He suggested that the Faculty reaffirm its adherence to the Code of the American Medical Association. He next alluded to the International Medical Congress at which, according to Billings, two per cent. of all the physicians in the world were present. The reception to Pasteur, a pure scientist, indicated the animus of that meeting and the drift of the medical opinion of the day. The value of Pasteur's researches next received attention. There is no fact in science that will not be utilized, sooner or later. The discovery of yeast fermentation is an illustration, since this led to Pasteur's investigations, suggesting that putrefaction was due to a new arrangement of particles dependent upon living germs introduced from the atmosphere. He referred to a paper read by himself before the Faculty in 1878 upon the subject of Spontaneous Generation. There are different sorts of fermentation due to different varieties of germs. It has been proven beyond doubt that if these germs be destroyed organic substances may be exposed to an atmosphere thus sterilized without decay. These germs preserve their vitality with great tenacity even when dried and reduced to powder. Lister first applied the germ doctrine to the treatment of disease, by seeking to exclude these germs from contact with wounded surfaces. Listerism has taught us a valuable lesson, not the specific action of carbolic acid, but the all importance of scrupulous cleanliness and a pure atmosphere.

The author then sketched the history of the researches made in regard to charbon, one of the most destructive of the infectious diseases affecting the lower animals and even man, 528 deaths having occurred from this cause in the human race in the province of Novgorod, Russia, alone, between 1867 and 1870. The conveyance of charbon by earth-worms suggests whether these hitherto supposed insignificant creatures may not be the means of propagating other forms of disease to man since we live upon animals and vegetables which are exposed to their influence. Wool-sorter's disease and chicken cholera were also alluded to briefly. Researches have shown that diseased germs are only low types of vegetation, capable of mitigation by culture in a manner analogous to the variation in the character of esculent plants through artificial cultivation. Recent experiments also point to the power of change of innocent microphytes into the most deadly germs; that they may be rendered destructive to life by malsanitary influences, such as we are constantly surrounded with. The author believed that the benefit of high altitudes in consumption is due to the purity of the atmosphere, its freedom from germs, and has acted on this idea in the climatic treatment of the disease. The protection afforded against severe forms of disease by vaccination with cultivated and hence mitigated germs rests upon the testimony of others besides Pasteur—as Greenfield and Toussaint; but the experimentum crucis was Pasteur's inoculation of 50 sheep, and the verification of his prophecy that the unvaccinated half would be found dead on the following day whilst the others would remain unharmed. A similar application of this same principle has been made by Pasteur to chicken-cholera. The germs of malaria are being studied by Klebs and Tommassi-Crudeli and

Klebs announced four years ago (and his statements have since been verified) the infectiousness of phthisis, and showed that injured joints in animals in whom phthisis had been artificially produced become the seat of specific micrococci and tuberculous disease. We are a long way from finding as yet protective vaccination in other diseases; we must first find the germs of the infectious diseases. The author then pointed out the important bearing of these researches upon Jennerian vaccination. The imperfect protection obtained from the use of humanized virus—a thing that we might now expect from our recently acquired knowledge—led to the exclusive employment of bovine lymph. Martin, of Massachusetts, showed that virus, the third remove from the heifer, fails to produce the disease in that animal. We owe a debt of gratitude to Dr. Martin for introducing the pure Beaugency virus into this country. This gentleman had offered a large reward for a case of smallpox occurring in a person within 10 years after vaccination by his bovine lymph, but it has never yet been claimed. The author claimed that in bovine vaccination we never introduce other diseases, nor do we by it impair the vigor of our bodies. He closed by thanking the Faculty for the honor of selecting him to preside over it, and asking for indulgence for shortcomings and inexperience.

REPORTS OF OFFICERS AND COMMITTEES.

The Corresponding Secretary then presented his report accompanied by letters of acceptance of honorary membership from Professors Goodell and Mallet.

The Treasurer made his report for the year ending April 11th, 1882. The membership had been diminished during the year by 13—7 deaths, 5 withdrawals, 1 dropped for non-payment of dues, and increased by the

election of 26 active and 2 honorary members. The receipts had been \$2243.40, the disbursements \$1696.57, leaving a balance in the Treasury of \$546.83. The assets (including estimated value of library \$7000) were \$7823.85, liabilities \$187.50.

The Executive Committee made a report which was accepted.

The Board of Examiners for the Western Shore reported favorably upon the names of thirteen candidates for membership, the vote upon which was postponed in accordance with the constitution until the following day.

The Library Committee reported total receipts \$493.80, expenses \$487.87. The number of volumes in the Library is now 3,069, being an increase of 325 during the year. Donations of books, pictures, a letter of William Cullen, *Minute Book of the Harford County Medical Society (1797)*, &c., were acknowledged. 49 Transactions, and 118 medical journals were received regularly during the year. The entire exchange list of the *Maryland Medical Journal* is now placed at the disposal of the Committee. The report concluded with the statement that without the special assessment of \$3.00 levied upon each member at the last annual meeting, the work of the Library would have had to cease.

The Committee on Publication reported that 500 copies of the last Transactions had been issued in October last, with 700 copies of the annual oration of Prof. Goodell, the total cost of which amounted to \$462.80.

The Committee on Memoirs reported through Drs. Kemp, Latimer, and Christopher Johnston, Jr., by whom memoirs were read of Drs. J. McKew Sullivan, J. Wm. Walls, I. D. Thomson, E. Lloyd Howard, T. Clay Maddux, Beniah Titcomb, and Samuel P. Smith, members deceased during the year.

Dr. Bowie, Curator, reported that the space allowed for the pathologi-

cal specimens belonging to the Faculty was very cramped and renewing the recommendation of the establishment of a museum.

SECTION ON SURGERY.

The Report of the Section was made by *Dr. L. McLane Tiffany*, who exhibited a patient recovered after a *hip-joint amputation*, the second successful case in Maryland, at least in civil practice. The operation was done in November, 1881. For 18 months previous to that time the patient had had a tumor of the left thigh which proved to be a small-celled sarcoma of the femur without evident cause. When first seen (two weeks previous to operation), the tumor was of a fusiform shape eight inches long and the same transversely. Antisyphilitic treatment was ordered, and diagnosis reserved. Two weeks later, the bone suddenly gave way establishing the diagnosis, and amputation was advised and performed. An abscess formed about 6 weeks afterwards, which has continued weeping up to the present time. The cause of this discharge was not known. Otherwise the stump was in excellent condition and the patient goes about on crutches. The operation was done by anterior and posterior flaps made by transfixion. Subsequent treatment consisted in simple cleanliness and allowing the wound to heal from the bottom.

Dr. Tiffany also read a paper on the "*Treatment of Cancer of the Rectum*." No disease is more insidious in its approaches, more painful in its progress or more fatal in its termination, when once established, than rectal cancer. Generally speaking, to make the diagnosis is to prognosticate slow death; until a recent date but little has been done except to alleviate symptoms. Thanks now to the recorded experience of many earnest surgeons it can be said that very

great help and in suitable cases a cure can be obtained.

Cancer of the rectum, in the great majority of cases, is of the variety termed epithelioma and the malignant epithelial formation shows cells of the columnar variety. Exceptionally only does the neoplasm resemble its analogue near the mouth, and then it will be found to commence at the junction of the skin and mucous membrane where squamous cells exist. The disease commences usually within the anus, removed from ordinary touch and sight, and preferably in middle life.

The sequel of symptoms is as follows: a constant excess of moisture about the anus, itching, a discharge muco purulent, purulent, with or without blood, discomfort, pain attended with a sensation of bearing down, more or less pronounced straining during evacuation, constipation alternating with diarrhoea; in a certain number of cases pain is not noticed until an advanced period of the disease. The commencing trouble is ignored by its possessor and the first symptoms observed are attributed to piles. No word is made to do duty for so many pathological conditions as this same "piles."

When a correct diagnosis is made, the opportunity for curative treatment has passed. It is an over-willingness on the part of physicians to direct treatment on insufficient evidence which has given to rectal cancer its great mortality. An early diagnosis can not be too much insisted upon; for the patient it is the difference between death and recovery, for the physician the difference between success and failure. It has never been the author's fortune to see a case of rectal cancer which had not been treated as piles for a variable period and thus valuable time lost. Attention was directed to the necessity of searching for rectal cancer in its early stage for we are somewhat in ig-

norance of what symptoms to look for. It is now recognized only when marked indications call for its relief; the semeiology of its incipency has yet to be established. The only hope of relief rests upon the early appreciation of its existence. Epithelioma of the lip may be cured by excision and there is no apparent reason why a like result should not be obtained when the morbid product attacks the rectum. Malignant growth does not at once spring into full activity.

Given then a rectal cancer what will you do with it? Cure it if you can. If you can not cure, palliate. Cure is to be gained by removing the growth. Excision of the lower end of the rectum has been practiced, relegated to oblivion and again revived and made use of in proper cases. Its true position as a surgical procedure is now established.

It is a good operation and should be done when there is good prospect of removing the malignant growth in its entirety. A cancer fit for incision should be small, situated at the lower end of gut, movable upon subjacent parts and unaccompanied by secondary growths in the groin, or elsewhere. The anterior two inches of rectum in either sex are always uncovered by peritoneum, and it is possible to excise the entire cylinder of the lower end of the rectum as high as the peritoneal junction, say three inches behind and two inches in front. The peritoneal cavity will not be endangered by observing this rule. A growth which does not exceed the limits mentioned is safe for excision. The finger should detect not only the limit of the disease but also appreciate the existence of healthful tissue above the cancer, but still within the the excisable territory.

The operation is done by making two semilunar incisions so far as to enclose the anus, the distance from the verge depending upon the situation of the cancer. The cuts are deep-

ened and the rectum gradually drawn down. The gut is stitched to the skin and divided as far as possible above the growth within the limit of safety. The rectal wall being very vascular it is well to cut it with Paquelin's cautery. Hemorrhage may be controlled by ligature and hot water. When not possible to draw down the rectum and attach to the skin, experience has shown that a gap may intervene followed by good results. The after treatment consists of strict cleanliness, irrigation, etc. Wounding the peritoneum should be avoided, but an aperture made should be sutured. Wounds inflicted upon bladder or vagina should be treated upon surgical principles.

Pelvic cellulitis or septicæmia, after peritonitis, are the most frequent causes of death, and are to be treated by cleanliness and irrigation. Iodoform is still on its trial, carbolized water is very efficient.

The following case was recently operated on by Dr Tiffany. Female, 47 years, single, three years since tumor removed from over sacrum. One year since began to feel discomfort about anus, and three months ago learned she had rectal cancer. Complained of sanguineous discharge, severe pain during defecation, bearing down pain in the rectum at other times. Epithelioma found on examination resting against rectum. Growth movable upon subjacent tissues. No glandular enlargement, general health good. Growth involved nearly lower three inches of rectum behind and about one and a half inches in front. Excision offered and accepted.

Operation performed February 27, 1882. Anus encircled by incision which was gradually deepened and the gut drawn down. Fingers and knife used to free the rectum. Bowel wall divided above neoplasm by Paquelin's cautery. Edges stitched to skin except behind where apposition was impossible. Perineum split to coccyx

to facilitate drainage. Patient leaves for home this week.

Should excision be impracticable, pain and obstruction demand attention. It is of primary importance to secure a soft evacuation daily. Bougies are more than questionable and large injections are only necessary to remove large impacted masses. Iodoform suppositories often alleviate the suffering, but their use should be occasionally suspended. Opium is needed in sufficient quantity to relieve the pain. Linear rectotomy—division of the sphincter and rectum back to the coccyx—had given relief to irritability and spasm of the lower bowel in Dr. T's hands second only to opium. Sooner or later, in consequence of the amount of obstruction, or the pain arising from the passage of fecal matter over the ulcerated surface colotomy demands consideration. Dr. T. had performed colotomy 3 times; two of the patients died subsequent to the operation, the third is still living over a month having elapsed. In operating, the colon is found without difficulty when distended; when empty the kidney is the most reliable guide, the gut resting on the anterior surface of the lower end of this viscus which is itself easily felt in the sub-peritoneal fat. The third case referred to is that of a man aged 60, who after being treated by a pile doctor came under Dr. T's care with an epithelioma of the anterior wall of the rectum, 3 inches in diameter and adherent. The finger could not reach its upper extremity, and palliative treatment was adopted for 6 months, when colotomy was performed, March 9th; no complications occurred and wound healed well and rapidly. An oakum pad and bandage are sufficient to retain the feces after the operation.

Dr. G. Halsted Boyland read a supplementary report on "*Fractures of the inferior extremity of the radius*," based upon two cases observed by him. Both were in males, aged 24 and 55

respectively, and both were from falls upon the palm of the left hand. There was no crepitation in either, and no deformity in the latter. Both were treated by the plaster of Paris bandage, but some deformity remained permanently in the first.

The first day's Session then adjourned.

The *Second Day's Session* opened with three papers by members of the Johns Hopkins University Biological Department, exhibiting the results of researches carried on in the Laboratory of that Institution. The first was by *William H. Howell, A. B., and F. Donaldson, Jr., A. B.,*

ON THE FORM OF THE PULSE, AND ON
THE MEAN ARTERIAL PRESSURE IN
A DOG WITH PERMANENTLY
OPEN DUCTUS ARTERIOSUS.

The *post-mortem* of the dog experimented upon revealed a patent ductus arteriosus establishing a very wide communication between the aorta and pulmonary artery. The origin of the aorta was considerably dilated, but without atheromatous changes. The heart was enlarged with hypertrophy of the left ventricle. There was also apparent insufficiency of the mitral and pulmonary valves. There was a small valvular fold at the opening of the ductus into the aorta, so placed as to direct the stream of arterial blood from the l. ventricle along the aorta and prevent its passing into the pulmonary artery; on the recoil of the aorta, however, it would have tended to direct the flow into the pulmonary artery. Only one case of this anomaly is on record—in Guy's Hospital Reports for 1873. Auscultation during life revealed increased cardiac impulse, the heart apex shifted to the left, and a loud rasping systolic murmur most intense at the base with a slight murmur with the second sound. Tracings were taken with Marey's sphygmograph over the femoral artery, and were found to be entirely

normal. The femoral arteries were then laid bare, and a canula introduced into each, one being connected with an ordinary mercury manometer, the other with a Fick's federkymographion. A chronograph pen marked seconds, and a Marey's tambour registered respiration upon the same roll of paper. The tracings thus obtained indicated a normal arterial pressure which *a priori* was not to have been expected, but rather a marked and permanent lowering of general blood pressure in view of the free communication of the very extensive and distensible pulmonary vascular area with the systemic circulation.

The second paper was by *Dr. Henry Sewell*, associate in Biology, and *F. Donaldson, Jr., A. B.*, and was entitled

THE INFLUENCE OF INCREASE OF VENOUS
AND ARTERIAL PRESSURE UPON THE
CARDIO-INHIBITORY ACTION OF THE
PNEUMOGASTRIC NERVE.

The problems presented in this paper were suggested by experiments made during the past year upon the frog in a foreign laboratory. The researches referred to brought out the fact that increase of intra-cardiac pressure weakened or annihilated the cardio-inhibitory power of the vagus. The work undertaken by these experimenters was to test in the first place the main proposition, viz.: That variations in the intra-cardiac pressure affect the cardio inhibitory action of the vagus; secondly, to discover whether this peculiar effect exerted by increase of intra-cardiac pressure was limited to any particular phase of the heart's action; thirdly, to find out whether this influence of pressure was confined to any particular chamber of the heart. Finally, it was hoped to throw some light upon the nature of the action which causes so marked an influence on the efficiency of the vagus; whether that action was mechanical, due to overstraining of the heart's fibres, or whether the in-

creased pressure served to increase the heart's nutrition to such an extent as to keep it in action in spite of vagus excitement. To determine the problems presented, experiments were made upon the frog and terrapin chiefly.

The results of experiments made may be briefly stated as follows: 1st. It was found that a slight increase of pressure by which the heart was filled with blood, diminished the inhibitory power of the vagus, the strength of stimulating current and arterial pressure remaining constant. Even so slight an increase of venous pressure as was caused by raising the supply flask a half an inch was sufficient to lessen the power of the vagus. It is certain then that increase of intra-cardiac pressure brought about by raising venous pressure, without alteration in the arterial resistance, lessens the effectiveness of the cardio-inhibitory fibres of the vagus. 2d. Effect on cardio-inhibitory power of vagus of variation of arterial resistance, venous pressure remaining constant. It may be said that variation of arterial pressure within wide limits has no effect on vagus efficiency. 3rd. Effect of variation of the diastolic intra-ventricular pressure. In this case the arterial cannula was pushed past the semilunar valves until its end lay within the cavity of the ventricle. Increase of arterial resistance had no effect upon the vagus until blood had made its way backward through the auriculo-ventricular valves into the auricles, and thus raising the pressure within them. This last fact is an indication firstly, that insufficiency of the semilunar valves, though it cause great increase of diastolic intra-ventricular pressure has no influence on vagus inhibition, and secondly, though with increase of pressure within the ventricle at its diastole, the resistance to the systole of the auricles is augmented, we have evidence that the

peculiar effect on the vagus action, of increase of intra-cardiac pressure, can only exert itself during the diastole of the heart. 4th. Variations of pressure within the sinus and auricles together, ventricle excluded. In this experiment a slight increase of intra-cardiac pressure made itself quickly manifested in the diminished efficiency of the vagus. 5th. Effect of variations of pressure within the venous sinus alone. Increase of intra-sinus pressure lessens the efficiency of the vagus in the same general manner as considered above.

These experiments have confirmed on the frog and terrapin the fact that variation of intra-cardiac pressure has a very marked effect in modifying the intensity with which the cardio-inhibitory fibres of the vagus act on the heart. It has been shown that increase of systolic pressure in the ventricle is not the cause of this influence on the vagus action. It has been made probable that the result is not due to increase of systolic pressure within the auricle, and therefore that the whole heart is affected in this respect by variation of intra-cardiac pressure only during its diastole. It has been found that increase of pressure within the ventricle at its diastole, such as would follow from semilunar insufficiency, has of itself, probably, no effect on the vagus action. It was stated in conclusion by the authors that it was intended that the foregoing experiments should be simply preliminary to a study of the same subject upon the isolated heart of the mammal.

The third paper was from *H. H. Donaldson, A. B., and M. Warfield,*

ON THE VARIATION IN THE WORK OF THE HEART UNDER DIGITALINE.

The digitaline employed was Merck's. From evidence adduced from various sources it would appear that the rise by pressure from this agent is due to

the arterioles, not to variation in the work in the heart. Bœhm in 1872 claimed from a series of experiments made on the isolated frog's heart and his failure to see the constriction of the arterioles that the work done by the heart under moderate doses (.0005 grm. — .001 grm.) was increased. By a method of feeding the isolated heart of the mammal perfected by Prof. Martin, the authors were enabled to run first pure blood through the heart, then blood digitalized, and then pure blood again, changing no condition save that represented by digitaline in the blood. The venous and arterial pressures were always within normal limits. The doses varied from .0003 grm.—.005 grm. in 100 c.c. of blood. The heart was dosed and recovered from 4—6 times in each experiment, and the experiments lasted from 5—10 hours. Forty cases were recorded, of which eight were rejected on account of imperfections. From the remaining thirty-two the authors conclude that the work done by the isolated heart of the slider terrapin is always decreased by digitaline and that the amount of decrease bears a rough proportion to the size of the dose; that with small doses there is an initial quickening of the pulse; that it is the percentage of digitaline, not the absolute amount given, which is the important factor in varying the heart. Their main conclusion is contradicted by one series of direct experiments by Bœhm on the frog's heart, but is supported by all the experiments so far made on mammals. The terrapin heart being as good a starting point then for an inference as the frog's heart, they can infer that the work of the human heart is decreased by digitaline and not increased as has sometimes been claimed.

ELECTION OF MEMBERS.

The Faculty then proceeded to the election of members recommended by

the Board of Examiners, which with one exception, referred back on account of objections made by a member, resulted in the election of all the candidates, thirteen in number, among whom was Dr. Whitfield Winsey, colored, an alumnus of Harvard University.

INCREASE OF MEMBERSHIP DUES.

The amendment proposing an increase of dues of members residing in Baltimore city to \$8.00 a year, \$4.00 of which shall go to the use of the library, and appropriating to the same use \$2.00 of the \$3.00 already required of country members was then adopted by a three-fourths vote. It was noticeable that the young men particularly favored this increase which they regarded as essential to the welfare and efficiency of our growing medical library. The session then closed.

The *third day's session* was opened at noon April 13th by the delivery of the

ANNUAL ORATION

by Dr. A. M. Fauntleroy, of Virginia, the subject being *The reciprocal action of morbid bodily and mental influences*. Medical psychology rests upon the correlative action of mind and body and cannot be ignored in general practice. He began by assuming the existence of a mental force in the human organism associated with yet the superior of the vital physical energies therein manifested. Of the nature of the bond of union of the two we are in absolute ignorance. The nervous system is the physical condition of the psychical phenomena, the connecting link of the organs and regulator of the vital processes. The brain influences the entire organism descensively, while it in turn is acted on ascensively by bodily conditions. Morbid emotional states are not less frequently the causes of functional disorder in the organism than effects of

morbid bodily conditions. Instances are numerous of their influence upon the organic processes. Gout, epilepsy, and chorea, consumption, gastro-hepatic derangements, and especially hysteria, illustrate this interdependence. But it is nowhere more prominently exhibited than in the etiology and phenomena of insanity, into the causation of which both physical and moral influences take part. We breathe an atmosphere full of germs—commercial, political and religious—capable of infecting the nervous system, and on the other hand a predisposition to insanity may descend from antecedent generations which may be rendered actual by the mildest agency. In view of the complexity and delicacy of the brain's structure, its intimate association with the entire organism, the morbid influences within the body and the moral influences without, we should only be surprised at the rarity of insanity. The form which psychical disorder assumes is one of exaltation, depression or debility according to the constitutional and nerve power of the affected individual. The entire organism is morbidly involved either concomitantly with or in consequence of the brain's pathological state, so that to use the words of a great English alienist, a lunatic is insane to his finger's ends. The morbid bodily states react upon the brain increasing its disturbance by supplying the material out of which its illusions, &c., are framed.

At the conclusion of the address, Dr. Fauntleroy was unanimously elected an honorary member of the Faculty.

SECTION ON PRACTICE OF MEDICINE.

The report from the Section was read by *Dr. Thomas B. Evans*, who devoted himself exclusively to the subject of etiology, especially reviewing the recent researches into the nature of germs, thus going over much of the ground that had

been previously traversed by the President. The report concluded as follows: "With the light now so brilliantly thrown upon the field of scientific research, the darkness of ignorance is fast passing away; the mystery of contagion is revealed, and science enlightened by its cause, is resolving that marvellous problem of transforming the agent that caused death into one preservative against its assaults."

SECTION ON OBSTETRICS AND GYNECOLOGY.

The report of this section was made by *Dr. Thomas Opie*. The section had organized immediately after the last annual meeting, had adopted regulations for its guidance, and had held monthly meetings during the year. In order to perpetuate the work of the section from year to year, he proposed that two of the members of the retiring section should always be appointed upon the succeeding section. The chairman then reviewed the most important papers and cases brought before the section during the year, viz: A case of Extra-Uterine Pregnancy, presenting unusual and difficult points in diagnosis, by Dr. T. A. Ashby; a paper on the Use of Electricity in the treatment of Amenorrhoea, by Dr. B. Bernard Browne; cases of Ovariectomy during pregnancy, and of combined Intra-Uterine and Abdominal Twin Pregnancy, by Dr. H. P. C. Wilson; a case of Extra-Uterine Pregnancy, with Ulceration through the Abdominal Wall, by Dr. A. F. Erich; a paper on Ergot in Obstetrics, by Dr. P. C. Williams; one on the Obstetric Forceps in its relations to Perineal Lacerations, by Dr. Ashby, and one on the Forceps, by Dr. John Morris. The chairman then read the report of six cases of Septicæmia occurring at the Maternité Hospital, Baltimore, and maintained—1, the existence of a puerperal miasm as necessary to explain some of the facts in puerperal fever; 2, the probable close relationship, if not identity, of erysipelas and septicæmia; 3, the agency of septicæmia in the production of many of the sudden deaths imputed to heart clot. The report concluded with the relation of

two cases of ante-mortem heart clot, with the exhibition of the specimens.

SECTION ON MATERIA MEDICA AND CHEMISTRY.

The report was read by *Dr. John R. Uhler*. Allusion was made to the muriate of quinia (for hypodermic use), eucalyptol as an antiseptic, citrate of caffeine as a diuretic, tincture of iodine in malarial fever, carbolic acid injections to abort buboes and carbuncles, alcohol in otorrhœa, &c., the use of which had originated with or been extended by members of the profession in Baltimore. He referred deprecatingly to the great loss sustained in the means of nourishment for infants by the habit in vogue among mothers of drying up their milk, and said there was an opportunity here for a great and beneficent reform. He proposed that the dosage of drugs should be simplified by dispensing them in a liquid form (solution or essence) of which 3i would represent the invariable dose for adults.

SECTION ON SANITARY SCIENCE.

The report of this section consisted of three papers, by Drs. Morris, Kemp, Sr., and Van Bibber, Sr. The report opened with a paper by the chairman, *Dr. Morris*, on *Infant Mortality, especially from Diphtheria, in the City of Baltimore*. Of 8,816 total deaths reported during the year 1881 by the Health Department, 3,919, or 44 per cent., were in children under three years of age. 2,467, or more than 28 per cent., were from zymotic or preventable diseases, of which 630 were from diphtheria alone. In the Seventeenth ward there were 280 deaths from zymotic diseases, one-half of which were from diphtheria alone. The author combated the idea that the prevalence of this disease in the locality was due to defective sewers or house drains, and claimed that it was to be attributed to the offensive odors produced by the fertilizing factories in the vicinity, and which are caused by the action of sludge acid upon dead fish and other animal matter exposed in open tubs. He claimed that filth in the air was as bad and as capable of doing harm as that in water. The occurrence of disease was

also favored by the necessity of the residents in the ward alluded to to keep their doors and windows closed during the summer months to avoid the foul odor. Decomposing animal matter, under whatever form, is the cause of diphtheria; dampness alone is insufficient, in the author's opinion, for the generation of the virus of the disease, but, combined with filth, it is capable of rendering the latter more potent in the production of the disease germs.

The session then adjourned. Many of the members then went to the laboratory of Johns Hopkins University, to witness the action of a dog's heart isolated from the rest of the body except the lungs. The heart was supplied with warm defibrinated calf's blood, and its own nutrition was maintained by the integrity of the coronary circulation. The dog had been dead three hours at the time of the visit, and cadaveric rigidity had already begun.

In the evening a reception was held by the President, at his residence, 108 Park avenue, which was attended by a large number of the members and delegates.

The *fourth day's* session convened at noon April 14th. The first order of business was the reading of a paper by Prof. H. Newell Martin, M. D., D. Sc., M. A., of the Johns Hopkins University, upon

THE INFLUENCE OF VARIATIONS OF ARTERIAL PRESSURE, OF VENOUS PRESSURE AND OF TEMPERATURE UPON THE PULSE-RATE OF THE ISOLATED MAMMALIAN HEART

(An abstract of which by the author appears elsewhere in this number).

SECTION ON SANITARY SCIENCE.

The report was continued by the reading of a paper by *Dr. Wm. M. Kemp*, entitled "*A Review of the Action of the Board of Health of Baltimore in reference to the yellow fever epidemic in Portsmouth and Norfolk in 1855.*" The writer was at that time health officer of Baltimore, and with the other members of the Board of Health visited the infected cities at the beginning of the outbreak, and thoroughly inspected them,

This inspection convinced him in the strongest manner that the outbreak was of local origin and due to unsanitary conditions. The writer detailed very graphically the story of the epidemic, as far as it was connected with his subject. The Board courageously and in the face of violent opposition and the example of all the other cities and towns along the coast, persevered in the determination not to cut off intercourse with the infected ports. This action was based on the belief in the non-contagiousness of the disease and on the excellent sanitary condition of Baltimore at that time, and although numerous cases appeared among refugees after their arrival in this city, not a single instance was observed during the epidemic of its origin in residents.

The third paper from this section was read by *Dr. W. C. Van Bibber*, and was entitled *Drinking Water of the State of Maryland*.

The object of the report was to show which of the different waters found in the State to use for different purposes; how they may sometimes be improved; and which of them, if any, should be avoided. The author first discussed the chemical, physical, and vital properties of water. He next referred to the geographical boundaries of the State, and to the water sheds and water courses, the various sources of water-supply and distribution, and the influences of the same upon the health of the residents of the State. The State was divided into highlands and low lands, and the general appearances of health of the inhabitants of these two sections were contrasted. The Eastern Shore and the four lower counties of the Western Shore, on salt water, were referred to as low lands, and it was admitted that intermittent and remittent fevers are more prevalent in this section. Attempts to trace the cause of malaria to atmospheric conditions had not been successful. "It is possible," says the author, "that a study of the drinking water respectively used in the two sections, may hereafter give a more successful result to this most important inquiry." The differences which exist in the waters of the State were next considered. These waters were named as

rain, marsh, ice, sea, mineral, spring, well, including artesian wells, stream or branch, river, and mineral waters brought by commerce into the State and sold for table or medicinal purposes. The different properties, impurities and characteristics of each variety were fully treated of. It was stated that the inhabitants of the State depend for their daily use upon springs and wells, or stream and river water, one-half using the former, and one-half the latter. The sources of water-supply in the high and low lands of the State were referred to and the differences pointed out. In the hills and mountains the wells and springs are supplied by subterranean streams. In the level lands the water in wells and springs may have three different sources, namely, rain percolating the earth's crust, deep streams from primal formations, and a third source is the percolation and filtration of sea-water through the soil from the ocean and bay. This latter source was mentioned as a possible cause of ague and fever which prevails in large measure in the tide water sections of the State. The tide water coast of Maryland was stated upon the authority of the superintendent of the U. S. Coast and Geodetic Survey office to be 2,815 miles.

The water supply of Baltimore was next discussed. Estimating the population at 400,000 the full capacity of the two streams which furnish the city was given at 500 gallons to each person in 24 hours. "It is believed that Baltimore has now the largest proportional water supply of any known city." The quality of this supply and its management when collected were not treated of. The impurities of river water were stated to be of two kinds: mechanical suspended, and impurities held in solution. The first may subside by storage; the second must be removed by distillation or chemical reaction.

SECTION ON ANATOMY, PHYSIOLOGY AND PATHOLOGY.

The report of the Section was presented by *Dr. Randolph Winslow*, who took for his subject "*Anomalies of the Osseous and Ligamentous Systems.*" Owing to the lateness of the hour his

paper was at his request, read by title and referred to the publication committee.

SECTION ON PSYCHOLOGY AND MEDICAL JURISPRUDENCE.

The report of this Section was made by the Chairman, *Dr. J. S. Conrad*, upon "*Associated Physiological and Pathological Psychology of the Insane.*" It was likewise read by title and referred.

There was no report from the *Section on Microscopy, Micro-Chemistry and Spectral Analysis.*

SECTION ON OPHTHALMOLOGY AND OTOTOLOGY.

The report was made by the chairman, *Dr. J. J. Chisolm*. After some general remarks upon the progress of Ophthalmology during the year the author referred to the great ignorance in regard to eye diseases and their treatment prevailing among general practitioners, many of whom treat all forms of eye lesions with one or other of the three remedies, nitrate of silver, acetate of lead and the blister. He laid down the following aphorisms which he said if committed to memory would prevent many mistakes, and an immense amount of mental and bodily suffering.

1. Do not blister; in nine cases out of ten it is a useless torture.
2. Do not use nitrate of silver; in not one case out of fifty is it beneficial as generally prescribed.
3. Do not use acetate of lead for fear of leaving lead marks on the cornea.
4. Weak astringents are the proper remedies for affections of the mucous surfaces, of which borax, sulphate of zinc and tannin are the best—their use to be combined with absolute cleanliness.
5. Use weak solutions of eserine for corneal affections.
6. Atropia solutions are essential to break up recent iritic adhesions.
7. When physicians have any doubt as to the disease of the eye which they are called on to treat, ask early for a consultation with those more familiar than themselves with eye affections.

The author alludes to eserine as a remedy which in all corneal affections has taken the place of all the remedies (a 2 gr. solution, three or four times daily).

Another use to which this agent is put is to contract the pupil dilated by atropia of which it is the antidote. Pilocarpin has the same effect on the pupil (8 grain solution) and internally administered had produced the best results in the author's hands in acute inflammations of the eyeball of any article in the pharmacopœia. Salicylate of sodium in iritic and scleral inflammations whether rheumatic or specific was very strongly recommended by the author in 30 gr. doses every four hours. Homatropin was recommended in preference to atropia and duboisia for dilating the pupil, its effect being evanescent. Among other subjects discussed were color blindness, myopia in school children, antiseptic eye surgery, nerve stretching, skin grafting, and optico-ciliary neurotomy. In reference to the last the author's experience was still in favor of it, since he has obtained many excellent and permanent results from its performance. The session then closed.

The *fifth and last day's session* was opened at 12 M., April 15th in Hopkins Hall. The reports of the Sections having been completed, volunteer papers were announced as in order. The first was by *Dr. John N. Mackenzie* on

DIPHThERITIC ULCERATION OF THE AIR PASSAGES AND ITS RELATION TO PULMONARY PHthisIS.

Dr. Mackenzie remarked that no subject in laryngeal pathology had awakened wider interest than the pathological conception of laryngo-tracheal phthisis. The association of ulcerative disease of the upper air passages with pulmonary consumption has been recognized from an early time, but the most divergent opinions still prevail concerning the correct interpretation of their reciprocal relationship. The existence of true tubercle as one of the chief etiological factors of *phthisis laryngea* is not now denied, but it remains to be decided whether all forms of ulceration of the upper air passages are due to the tubercular diathesis as primary cause, or may be regarded as accidental, owing their origin to influences associated with but not necessarily dependent upon the tubercular process. The object of this paper is to consider a variety of ulceration

which has an important bearing upon this question. The term *diphtheritic ulceration* has been adopted, in conformity to what the histological study of their development has led the author to regard as the correct pathology of these erosions. A study of this diphtheritic erosion was made by the author in the Rudolph and Jewish Hospitals of Vienna, and the description given was based upon an analysis of cases there observed.

Macroscopical Appearances.—Diphtheritic ulceration appears as small, superficial erosions of mucous membrane, in size from a pin head to a small pea, which stud the surface or coalesce and form a large, irregular ulcer. At first superficial erosions, they assume later a more characteristic appearance; their walls become sharp, regular and somewhat elevated; color light reddish shade to a pronounced livid hue. Base is either smooth and red in color or rough and uneven. It is covered with a yellow slough or orange-colored exudation. These ulcers, always multiple, are most abundant in the lower trachea and bronchi, though the whole trachea may be covered. The entire mucous surface may be destroyed. The author has never found them in the bronchi of an unaffected lung, but where both lungs are disorganized the bronchi of both sides are studded with them; met less frequently in larynx and pharynx. They may be found associated with or in the neighborhood of tuberculous ulcers. Examined *histologically*, the diseased structures presented in section the typical picture of circumscribed diphtheritic inflammation of the mucous membrane. The first stage of the process consisted in a high grade small-celled infiltration of the mucous membrane in its upper layer, with cloudy swelling of the superimposed epithelium. Distinct miliary tubercles were nowhere to be seen. Where nodules coalesced the membrane over considerable area presented the appearance of a sloughing of the upper layer of the mucosa. The anatomical appearances observed left no doubt that these ulcerated areas are the result of circumscribed superficial diphtheritic inflammation of the mucous membrane. In view of this interpretation of their nature, the author asks: "What prac-

tical conclusions can be drawn concerning the etiology of these lesions? Are they related to the phthisical process in the lungs, and if so, what is the nature of the relationship?" The first question is answered affirmatively, and, in regard to the second: "It seems impossible," he says, "to resist the conclusion that the foul contents of the pulmonary caverns, lingering in the bronchi and lower trachea, so irritate the mucous membrane as to cause it to react with diphtheritic inflammation."

After stating the opinions which prevail in respect to the part which the sputa play in the production of laryngeal phthisis, the author observes that reconciliation of these widely divergent views may be accomplished by referring to the corrosive action of the sputa those ulcerations alone which form the subject of this paper. The author next sums up the evidence upon which the co-relationship between diphtheritic ulceration of the air passages and the corrosive action of the sputa rests, as follows: 1. The predilection of the ulcers for those places which are in constant contact with the sputa. 2. The fact that they increase in number as the lungs are approached. 3. They may be traced from the bifurcation of the trachea to the division of the bronchial tubes, where in all cases they become visible only in one tube, which is that leading to a cavity. 4. Their absence from bronchi of lungs not the seat of cavities or advanced phthisical changes. 5. Their occasional presence in the oesophagus stomach and intestines from swallowing of sputa. 6. Their occasional appearance in suppurative pneumonia and gangrene of the lungs.

"These lesions, therefore," says the author, "may be regarded as the result of an inoculation, so to speak, of the mucous membrane with the detritus from the broken down pulmonary tissue, leading to the production of a loss of substance pathologically distinct from, but possessing some of the characteristics of, the tubercular ulcer."

The next paper was by *Dr. William Lee*, and entitled

RECURRENT HEADACHES IN CHILDREN.

These cases are characterized by great irritability of the nervous system, an expression of listlessness, flabbiness of the facial muscles, especially those of the forehead and lids. The muscles of the limbs also hang loose and appear lifeless, although sensitive on massage. Owing to the great sensitiveness of the nervous system, headaches in the young seem often to be the main cause of ill health.

Observations confirmatory of these statements had been made in hereditary and hysterical headaches, in those due to the rheumatic, gouty, and syphilitic diathesis, and in those cases accompanied with a predisposition to rickets and epilepsy.

The next paper, by *Dr. I. E. Atkinson*, on

SIMPLE CHANCER OF THE PREPUTIAL MARGIN,

was read by title, and referred to the Publication Committee.

MISCELLANEOUS BUSINESS.

The remainder of the session was taken up with the reports of various special committees, unfinished and miscellaneous business. Much of this was deferred to the special meeting appointed for May 2d. Among matters acted upon was the adoption of an amendment to the Constitution creating the office of Reporting Secretary, the substitution of the fourth Tuesday in April instead of the second Tuesday as the time for holding the annual session, and the adding of laryngology to the section of ophthalmology and otology. Among the subjects deferred was action upon the report of the Library Building Committee, which recommended the appointment of a board of trustees, who should hold in trust the \$500 derived from the sale of the Courtland street house, and such other sums as should be raised for the erection of a library building until the amount should reach \$15,000.

ELECTION OF OFFICERS.

The election of officers was then entered into with the following result: President, Dr. Wm. M. Kemp; Vice-

Presidents, Drs. Richard McSherry and Thos. S. Latimer; Rec. Sect'y, Dr. W. G. Regester; Ass't Sect'y, Dr. G. Lane Taneyhill; Cor. Sect'y, Dr. W. F. A. Kemp; Rept'g Sect'y, Dr. Eugene F. Cordell; Treas., Dr. Judson Gilman; Ex. Com., Drs. Frank Donaldson, P. C. Williams, H. P. C. Wilson, L. McLane Tiffany, and Christopher Johnston; Examining Board for Western Shore, Drs. S. C. Chew, I. E. Atkinson, C. H. Jones, T. F. Murdoch, James A. Steuart, B. B. Browne, and Thos. A. Ashby; Examining Board for Eastern Shore, Drs. A. H. Bayley, J. B. Bordley, J. E. M. Chamberlain, and A. A. Hanna. The following are the Chairmen of the Standing Committees and Sections appointed by the President: Lib. Committee, Dr. I. E. Atkinson; Pub'n, Dr. W. G. Regester; Memoirs, Dr. H. M. Wilson; Ethics, Dr. J. Carey Thomas; Section on Surgery, Dr. O. J. Coskery; Practice of Medicine, Dr. Samuel C. Chew; Obstetrics and Gynecology, Dr. W. T. Howard; Materia Medica and Chemistry, Dr. W. Stump Forwood; Sanitary Science, Dr. Jno. R. Ward; Physiology and Pathology, Dr. Thos. S. Latimer; Psychology and Medical Jurisprudence, Dr. C. H. Ohr; Microscopy. Micro-Chemistry and Spectral Analysis, Dr. Isidor Bermann; Ophthalmology, Otology, and Laryngology, Dr. A. Friedenwald. Dr. H. S. Bowie was reappointed Curator, and Dr. Robt. T. Wilson an additional Assistant Secretary.

ADJOURNMENT.

After the passing of a resolution of thanks to the authorities of the Johns Hopkins University for the use of the hall and a few congratulatory remarks upon the harmony of the session and the encouraging prospects of the Faculty, the 84th annual convention came to a close.

DELEGATES AND VISITORS.

The following were in attendance upon this meeting: Dr. J. M. Toner Washington, D. C.; Dr. George E. Ranney, Sect'y Michigan Med. Society, Lansing, Michigan; Dr. John Montgomery, Chambersburg, Penn'a; Drs. W. Stump Forwood, J. T. H.

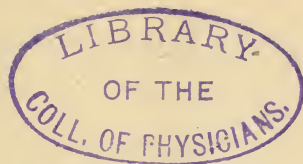
Gorsuch, and W. W. Virdin, of Harford Co., Md.; Drs. R. Gundry, J. S. Conrad, C. G. W. Magill and P. H. Reiche, of Baltimore Co.; Drs. R. W. Eareckson, T. B. Owings and T. P. Temple, of Howard Co.; Drs. C. H. Ohr and G. Ellis Porter, of Alleghany Co.; Dr. A. H. Bayley, of Dorchester Co.; and A. A. Hanna, of Cecil Co.

ORIGINAL ARTICLES HAVE APPEARED IN THIS VOLUME FROM

Arnold, J. D.
Ashby, Thos. A.
Atkinson, I. Edmondson
Bartholow, Roberts
Bermann, I.
Bigelow, Horatio R.
Branham, J. H.
Chambers, J. W.
Chancellor, Chas. W.
Chisolm, Julian J.
Conrad, J. S.
Coskery, O. J.
Da Costa, J. M.
Dickson, John
Ellis, R. H. P.
Erich, A. F.
Frank, Sam'l L.
Friedenwald, A.
Gilman, Judson
Heitzmann, C.
Johnston, Christopher
Kane, H. H.

Lee, William
McKew, D. I.
Martin, H. Newell
McSherry, Richard
Michael, J. E.
Miles, F. T.
Monmonier, J. N.
Morison, Robert B.
Morris, John
Opie, Thomas
Quinan, John R.
Read, E. M.
Rennolds, H. T.
Rivers, E. C.
Rohé, George H.
Sellman, W. A. B.
Sims, J. Marion
Theobald, Samuel
Thomas, Richard H.
Thomson, William H.
Tiffany, L. McLane
Wiltshire, J. G.

Winslow, Randolph



INDEX TO VOLUME VIII.

	PAGE.		PAGE.
Abdominal Section, 110 cases of....	383	Anterior Splint, Hodgen's.....	239
" Surgery, Drainage in...	238	Antiseptic Amputation.....	331
" Recent Advan-		" Irrigation vs Spray.....	22
ces in.....	287	" Method in Compound	
Abortion.....	91	Fractures.....	238
" Habitual.....	541	Antiseptic Methods, General Accep-	
" Self.....	429	tance of.....	331
Abscess of Bartholin's Gland causing		Apologue.....	240
Recto Vulvar Fistula.....	399	Arnold, J. D.....	29
Abscess of Brain fatal without coma.	332	Arsenic, subcutaneously in Lichen	
" Hepatic..... 40, 89, 351,	521	Rubrum.....	95
" " Surgical Treatment of	94	Ascites from Chronic Ovaritis.....	356
" from Hypodermic Syringe.	414	Ashby, Thomas A.....	49, 464
" Pelvic.....	111	Aspiration, frequent in Hydrothorax	304
" " Differential Diagnosis of	217	Atkinson, I Edmondson.....	225, 529
" " Opening into Uterus....	429	Atlanta Medical Register.....	261
" of Tonsil.....	111	Atropia, Erysipelas of Face from...	351
Aconite, Poisoning by.....	549	" and Duboisia, Hostility to.	375
Address to Graduating Class, Univ.		Aural Cases. Glaring Defect in Treat-	
of Md.....	529	ment of.....	180
Agony Over, The.....	257	Bacillus Anthracis.....	186
Ainhum.....	233	" Lepræ.....	233, 399
Akido-Galvano-Cautery.....	233	" Malariæ.....	327
Albany College of Pharmacy.....	259	Backache, High heeled Shoes as a	
Alcoholic Coma.....	125	cause of.....	94
Allochiria.....	190	Baltimore Academy of Medicine.....	547
Alumni Association, Univ. of Md ..	119	Baltimore Academy of Medicine,	
American Dermatological Associa-		Reports... 158, 280, 303, 351, 401,	521
tion	231	Baltimore Eye, Ear and Throat Char-	
American Gynecological Society,		ity Hospital.....	501
Transactions.....	284	Baltimore Medical Association ..383,	431
American Medical Association.....	41, 47	Baltimore Medical Association, Re-	
Anæmia, Treatment of.....	20	ports.....	156, 323, 416, 541
Anatomy, Atlas of Human, <i>Jeancon</i>	162	" Medical College.....	237, 528
" Compend of, <i>Roberts</i>	237	" and Ohio R. R. Relief As-	
" and Surgery, Practical In		sociation.....	118
struction in.....	423	Baltimore Medical and Surg. Society	454
Anderson, Samuel H.....	183	" Medical and Surg. Society	
Aneurism, Ligation of Femoral Ar-		Report	109
tery for.....	472	Bartholow, Roberts.....	505
Aneurism, supposed Intra Cranial .	521	Bathing.....	88, 107, 129, 153
" Treatment of.....	260	Battery, Faure's Storage.....	334
Angina Pectoris.....	190	Batley's Operation.....	287, 406
Anglo-Swiss Milk Food.....	428	Beaconsfield, Lord.....	9
Announcement, Editorial.....	18	Bermann, I., Dr.....	265, 409
Anterior Splint, Critical. Historical		Bigelow, Horatio R... 1, 121, 241,	367
and Clinical Study of Smith's.	399, 443	Billroth's Clinic.....	61

	PAGE.		PAGE.
Billroth's Patient Dead.....	116	Chloroform Anæsthesia, Primary....	526
Bladder, Foreign Bodies in.....	357	" " Risks of. .	402
" Tumor of.....	118	" Syncope.....	417
" and Prostate, Diseases of,		Chopart's Amputation, Is It Justifi-	
<i>Coulson</i>	236	able?.....	103
Bladder and Prostate, Extirpation of	330	Chorea in the Aged.....	382
Bliss, Dr.	167	Choroiditis, case of Metastatic.....	540
Board of Health, Annual Report of		Clinical Society of Maryland, Annual	
National.....	379	Meeting.....	311
Board of Health, Powers of State ..	141	Clinical Society of Maryland, Re-	
Books and Pamphlets, 65, 113, 163, 381,		ports, 89 306, 349, 398, 445, 474, 494,	
426, 525		543	
Boteler, Wm. C., Professor.....	68	College of Physicians and Surgeons,	
Brain and Skull, Large.....	550	46, 119, 251, 527	
Brains of Criminals. Studies of, <i>Ben-</i>		Colion, Epithelioma of... ..	349
<i>edikt</i>	405	" Perforating Ulcer of.....	447
Branham, J. H.....	125	Colorado, State Med. Society, Trans-	
Breathing, Habitual Mouth, <i>Wagner</i>	162	actions	425
Bridges, Robert, Dr., Death of.....	486	Colotomy	494
Bright's Disease.....	60	" in Cancer of Rectum 311, 411	
Bronchus, Cartridge Shell impacted		Commencements.....	527
in	474	Conrad, J. S.,	481
Buccal Ulcerations of Constitutional		Consumption, Treatment of.....	407
Origin.....	233	Contagion Carried by Domestic	
Bullet lodged in Brain 16 days.....	328	Animals.....	551
Calcium, Oxy-Sulphuret of.....	233, 344	Cordell, E. F.....	371, 391
Calculi, Extraction of in Egypt 300		Coronary Arteries of Heart, Blood	
years ago.....	333	Pressure in.....	14
Calculi, Solvent, Treatment of.....	329	Correspondence. 139. 228, 322, 394, 443	
" Vesical.....	449	444, 518	
Cancer of Pancreas with fatal Jaun-		Coskery, O. J...8, 97, 183, 385, 414, 457	
dice.....	90	Cranium, Syphilitic.....	446
Cancer, Pre-Cancerous Stage of.....	547	Credé's Method.....	430
Capon Springs as a Health Resort..	228	Credit the Source.....	186
Carbolic Acid Poisoning.....	159, 183	Cremation <i>vs.</i> Burial.....	553
Carcinoma, Hypophosphites in.....	550	Croup, Catheter in	118
Castor Oil, Tasteless.....	331	" and Diphtheria, non-iden-	
Cat and Rabbit, Blended Features		tify of.....	474
of in a Kitten.....	187	Cullen, Wm., Letter of	164
Catalepsy, Treatment of.....	330	Da Costa, J. M.....	60
Catalogue, Index, of Library of		Dangers and Duties of the Hour... ..	38
Surg. Genl's Office.....	162	Day, Richard H.....	444
Catheterization in Croup.....	187, 291	Death, Smell of	70
Celerina.....	118	Deaths	163
Cerebellum, Tumors of.....	260	Dermatological Association, Ameri-	
Cerebral Localization.....	287	can.....	176
Cerebroscopy.....	453	DeRosset, M. J.....	71
Cervix Uteri, Application to Pregnant	280	Diabetes Mellitus.....	280
" " Catgut in Lacerated....	427	Diarrhœa of Children, Nervous	348
" " Chance of.....	503	" in the Young.....	174
Chambers, J. W.....	150, 250, 289	Dickson, John	487
Chancellor, C. W., 33, 58, 88, 107, 150,		Digitaline, Effect on the Heart of	
250, 289		Digitalis in Syncope and Collapse	
Charbon, Inoculation of.....	107, 191	Digestion, Lectures on, <i>Ewald</i>	285
Chisolm, Julian J.....	180, 375	Diphtheria.....	138, 416, 569
Chlorate of Potash, Dangers of.....	45	" and Fifth	159

	PAGE.
Diphtheria, Lemon Juice in.....	160
“ Local Treatment in ...189,	238
“ Peculiar Paralysis follow- ing.....	419
Diphtheria, Precautions against.....	58
“ Recovery from Laryngeal	160
“ Report of Wood & For- mad.....	477
Diphtheria, Slaking Lime in.....	526
“ Treatment of.....	526
Diphtheritic Albuminuria.....	17
“ Contagium, Nature of	307
“ Ulceration of Air Passages	571
Disease, Definition of.....	259
Doctors' Opening of York Hospi- tal, Report of.....	62
Douche, Notes of 27 Cases of Intra- Uterine.....	176, 196
Drainage for Health, <i>Wilson</i>	547
“ Tubes	259
Drugs that Enslave, <i>Kane</i>	15
Drum-Heads, Cotton moistened in Glycerine for.....	117
Duboisia in Ophthalmic Practice...	222
Ductus Arteriosus, Pulse and Arte- rial Pressure in.....	565
Dysentery, Injection for.....	503
Ear, Constitutional Treatment in Diseases of.....	476
Ear, Maggots in.....	350
“ Removal of Foreign Bodies from	428
Earthworms, the Conveyers of Splenic Fever Poison	356
Eczema and its Management, <i>Bulk- ley</i>	64
Editorial...18, 41, 66, 93, 114, 141, 164 184, 215, 234, 257, 282, 307, 325, 352 377, 402, 420, 449, 477, 496, 523, 545	
Education, Medical.....	216, 430
“ Physical.....	323
Eighteen Hundred and Eighty-one	377
Electric Bath	332
Electricity, Medical, <i>Bartholow</i>	64
“ in its Relations to Medi- cine and Surgery, <i>Rockwell</i>	546
Ellis, R. H. P.	411
Endowment.....	93, 430, 455
Epilepsy, Bromides in.....	333
“ mistaken for Angina Pec- toris	402
Epiplocele, Irreducible	433
Erich, A. F.....	217
Eruptions from Benzoate of So- dium, &c.....	91

	PAGE.
Erysipelas in Lying-in Woman without Puerperal Fever.....	455
Eserine, Diphtheritic Paralysis of Ciliary Muscles Cured by.....	351
Essentials of Principles and Practice, <i>Hartshorne</i>	546
Excess in Living.....	216
Experiment, Value of.....	501
Extra-Uterine Pregnancy	20
Eye, Splinter of Wood 47 days in	335
Eye and Ear Diseases, Abuse of Nitrate Silver and Blisters in.....	5
Eyelids, Sarcoma of.....	109
Facial Paralysis	190
Faculty, Annual Meeting of.....18,	523
Female Practitioners Abroad.....	549
Femur, Fracture of Neck without Patient being aware of.....	159
Fiddle String as Bougie.....	359
Filaria Sanguinis Hominis.....	357
Finger, Supernumerary.....	306
Fistula, Recto-Vulvar.....	399
Fœtus with Arrested Development. “ Undeveloped with Normal Placenta.....	447 542
Foot, Sarcoma of.....	496
Forceps, Historical Study of.....	292
“ in Inducing and Preventing Perineal Lacerations.....	464
“ Introducing into Uterus, 191 “ Suggestions as to Using, 191	
Forearm, Hemi-Anæsthesia and Paralysis of	494
Foreign Medicine.....	95
“ View of Our Medical Status	548
Forwood, W. Stump.....62, 132,	252
Fractures, Some Points in Treat- ment of	457
Frank, Samuel L.....	437
French Faculties of Medicine.....	502
Friedenwald, A.....145,	171
Garfield, President, Early Treat- ment of	139
Gastric Fermentations.....	286
“ Juice, Acid of.....	329
Gastrosocopy and Oesophagoscopy	427
Germs and Disease.....	427
Germ Theory, Influence of on Modern Surgery.....	259
Gihon, Albert L.....	518
Gilman, Judson.....	553
Graduates, Advice to.....	261
Graduation Without Education.....	334
Gulf-Weed in Epilepsy and Obesity	322

	PAGE.		PAGE.
Gunshot Wound of Abdomen.....	183	Howard, E. Lloyd, Obituary of.....	262
“ “ “ Leg	207	Hughes, J. C., Death of.....	216
“ Wounds.....	203	Huxley Predicts.....	238
Gynecology and Obstetrics, Atlas of, <i>Martin</i>	162	Hydrophobia, <i>Bigelow</i>	112
Gynecology and Obstetrics, Thera- peutics of, <i>Atkinson</i>	354	“ Inoculating for.....	332
Gynecology, Rest Treatment in..	1	Hysteria, Management of.....	286
Gynecological Society, American...	259	Hysterical Aphonia.....	115
Hagerstown Medical Society	119	Impotence, Psychological.....	143
Hallucinations	240	“ Sterility and Allied Disorders, <i>S. W. Gross</i>	161
Harford County Board of Health	188	Incorporation.....	420, 543
Harford County Medical Society, Report of.....	132	Independent Practitioner	95
Headache Syphilitic.....	225	Indigestion, Biliousness and Gout, <i>Fothergill</i>	381
Headaches Recurrent in Children,	572	Infancy and Childhood, <i>J. L. Smith</i>	327
Heart, Influence of Pressure and Temperature on.....	556	Infants, Management and Feeding of, <i>Keating</i>	237
Health Commissionership.....	452, 546	Inhalation of Carbolic Acid in Phthisis.....	188
“ Resorts of Europe.....	188	Insane, New Departure in Treat- ment of.....	141
Hearing, Loss from Fright.....	239	Insane Paupers, New Building for	119
Heart, Diagnosis of Fatty.....	44	Insanity, Emotional.....	542
Heart Isolating a Mammalian.....	13	Intertrigo, Treatment of.....	526
“ Remediable Lesions of.....	250	Intestinal Obstruction by Wine Bottle.....	191
“ on Right Side of Body	239	International Medical Congress.....	208
“ Rupture of.....	429	“ “ “ Del- egates to.....	119
Heitzmann, C.....	344	International Medical Congress, Notes of Recent.....	361
Hemorrhage, Post-Partum.....	522	International Medical Congress and Sir J. Paget.....	235
Hemorrhage, Primary Spinal Men- ingeal.....	150	International Medical Congress, Pro- gramme of.....	94
Hepatic Abscess.....	40	Intra-Peritoneal Tumors, Recent Advances in Treatment of.....	286
Hepatology.....	407	Introduction.....	18
Hermaphrodite-Pseudo	166	Iodide of Potassium and Renal Disease	141
Hernia, Strangulated External, Un- known to Patient.....	200	Iodoform, Odorless.....	455
Hernia, Strangulated Inguinal.....	111	“ Tonga Bean to Disguise Odor of.....	447
“ “ Time for Op- erating in.....	97	Iodoform for Wounds.....	502
Hernia, Subcutaneous Injection in	447	Iris, Tuberculous Inoculation of....	335
“ Treated Conservatively, case of.....	341	Items, Medical...23, 47, 72, 96, 120, 144, 168, 192, 216, 240, 264, 288, 312, 336, 359, 384, 408, 432, 456, 480, 503, 528, 551	
Herniotomy, Subcutaneous	495	Jenkins' Run.....	93
Herpes Zoster	320	Johns Hopkins University.....	118
“ “ Facialis	323	“ “ Hospital, Foreign View of.....	353
Hip Joint Amputation	393, 405, 562	Johnston, Christopher.....	361
“ “ Disease, Treatment of... 246	269, 297	Joints, Spasm of indicative of Osteitis.....	280
Histology, Manual of, <i>Stowell</i>	16		
Homœopaths, Consultation with ...	429		
Hospital Appointments.....	527		
“ Relief Association of Maryland	403		
Hospital Sunday	312, 325, 428		
“ of the Women of Mary- land of the City of Baltimore.....	550		
Howard, E. Lloyd, Death of.....	236		

	PAGE.		PAGE.
Kane, H. H.....	337	Report.....	426
Keratitis, Interstitial.....	350	Massachusetts Medical Society.....	117
Kidneys, Extirpation of Floating.....	333	McKew, D. I.....	101
Knee-Joint, Chronic Disease of.....	331	McSherry, Richard.....	388, 444
“ “ Suppuration of.....	496	Medal, International Congress.....	501
Knives, Death from Swallowing... 333		Medical and Chirurgical Faculty of	
Labor, Management of Shoulders		Md.....	46
in.....	336	Med. and Chir. Fac. of Maryland,	
Lactation at advanced age.....	541	84th Annual Meeting.....	560
Lactopeptine.....	115	Medical and Chirurgical Faculty of	
Landmarks, Medical and Surgical,		Md., Report of Delegates to.....	132
Holden.....	285	Medical and Chirurgical Faculty of	
Lanier, N. R. S., Obituary of.....	431	Md., Reports.....	10, 35, 92
Laryngeal Phthisis.....	543	Medical and Chirurgical Faculty of	
Lead Poisoning, Chronic.....	60	Md., Report of Section on Ob-	
Lectures, Clinical, 8, 60, 73, 180,		stet. and Gynecol.....	323
203, 225, 320, 414		Medical and Chirurgical Faculty of	
Lee, William.....	174, 348	Md., Report of Section on Sani-	
Leprosy.....	232	itary Science.....	92
“ Evidence of Parasitic Ori-		Medical and Chirurgical Faculty	
gin of.....	352	of Md., Transactions of.....	310
“ in Maryland.....	283	Medical News.....	408
Liberality to Institutions of Learn-		“ Progress,.....	236
ing, Want of in Md.....	165	“ and Surg. Society of Balti-	
Lichen Rubrum Exudativum.....	95	more.....	109
Limbs, Inequality in length of lower	525	Meetings, Report of Committee on	
Listerine.....	167	Joint.....	132
Listerism, Achievements of.....	358	Membrana Tympani, Incision of... 382	
“ in Lyons.....	117	“ “ Rupture from	
“ in Ovariectomy.....	326	Slight Blow.....	159
Litholapaxy.....	239, 502	Meningitis, Syphilitic.....	91
Lithotomy, Stone weighing, 3½ oz.	401	Mental and Nervous Diseases, Man-	
Lithotripsy.....	401	agement of.....	70
Litré, Death of.....	261	Mercury, Hypodermic Injection of	
Liver, Abscess of and Melancholia	190	in Syphilis.....	234, 427, 448
“ “ from Brain Lesions	143	Michael, J. E.....	341
“ Echinococcus of.....	239	Microscope, Work with the.....	353
“ Specimen of Diseased.....	446	Midwifery, Modern, <i>Glisan</i>	309
London, Cinical Society of.....	356	“ Science and Art of, <i>Lusk</i>	499
Lumbago.....	69	Miles, F. T.....	193
“ Treated by Suction.....	318	Milk, Influence of in Spreading	
Lymphangioma, Cutis Multiplex... 232		Zymotic Diseases.....	239
Lymphatic Glands, Operations for		Milk from Tuberculous Cows... 329, 388	
Removal of.....	301	Million, Gift of a.....	451
Magnet for Removal of Steel, &c.,		Milton, M.....	322
from Eye.....	359	Mississippi Medical Association,	
Malaria Districts, How rendered		Transactions.....	353
healthy.....	402	Missouri Valley Medical Journal, 525	
Malaria, 250 cases treated by Tinct.		<i>Boteler and Hoyt</i>	525
Iodine.....	461	Mitral Affections, Treatment of.....	502
Malleus, Partial Necrosis and Re-		Money, How to get.....	20
moval of.....	304	Monmonier, J. N.....	246, 269, 297
Maltine.....	357	Monopolies, Danger of in Pharma-	
Mamma, Intra Canalicular Fibroma		ceutical Preparations.....	308
of.....	303	Monstrosity, Twin.....	160
Marine Hospital Service, Annual		Morison, Robert B.....	461

	PAGE.		PAGE.
Morris, John.....	118, 316, 413, 440, 536	174, 176, 193, 196, 200, 217, 222, 241, 246, 250, 265, 269, 289, 292, 297, 313, 316, 318, 319, 337, 341, 344, 348, 361, 367, 385, 388, 409, 411, 413, 433, 437, 440, 457, 461, 464, 469, 481, 487, 492, 505, 513, 529, 536, 540, 553.	
Morphia Habit, Rapid Spread of in Germany.....	337	Osborn, Wm. H., Death of.....	118
Morphia Hypodermic Injection of	79	Osteo-Sarcoma of Tibia.....	306
Murmur, Intra-Cranial.	351	Otorrhœa, Case of Chronic Purulent.....	437
Murmurs, Differential, Diagnosis of	36	Ovarian Compression.....	454
Myodynamics, <i>Wight</i>	113	“ Cyst.....	495
Myopia from School-Life.....	382	“ “ Traumatic Rupture of	357
Myxœdema and Bright's Disease...	454	“ Tumor or Pregnancy?....	280
Nævus of Cheek, Rapidly Growing	303	Ovariectomy, Abortive Attempt at...	324
Neck, Tumor in the.....	8	“ Death after due to Tapping.....	549
Nerve-Stretching in Locomotor Ataxia.....	289, 307	Ovum Blighted with Degenerated Membranes.....	278, 323
Nerve Stretching in Spinal Disorders.....	328, 428	Oysters, Sewage in.....	359
Nerve-Stretching in Tetanus.....	307	“ Spoiled in Cooking.....	407
Nervous Disease, New Form of <i>Searle</i>	405	Paget, Sir James.....	208
Nervous Diseases, <i>Hamilton</i>	500	Palate, Papilloma from Soft.....	304
“ “ <i>Hammond</i>	160	Pancreas, Cancer of with Fatal Jaundice.....	90
“ “ <i>Mitchell</i>	17	Panspermism.....	384
“ System, Applied Anatomy of, <i>Ranney</i>	424	Paralysis, Reflex.....	109
Nervousness, American, <i>Beard</i>	161	Paris Hospitals.....	7
“ from Intemperance....	382	Parke, Davis & Co.....	551
Neuralgia.....	112	Parotid Tumor.....	350
Neuritis of Ulnar Nerve, Two cases of.....	193	Patella, Fractured, Treated by Lister.....	188
New York Letter.....	394	Pathology and Morbid Anatomy, <i>Green</i>	65
“ “ Medical Society and Code of Ethics.....	545	Pellets, Soluble Compressed.....	45
New York Profession.....	19	Pelvis, Labors in Contracted.....	324
Nipple on Thigh.....	318	Penn'a and Union Med. Ass'n.....	187
Nitrous Oxide.....	326	“ “ “ “ “ Re-	
Northwestern Lancet.....	286	port of.....	252
Notes, Local.....	286	Perineum during Labor, Management of.....	49
Nurse and Mother, <i>Coles</i>	424	Perineum, Lacerated.....	280, 335
Nursery and Child's Hospital.....	428	Peritoneal Surgery, Recent Progress of.....	273
Nurses, Arrival of Religious Order in Baltimore.....	115	Peritoneum, Operative Interference in G. S. Wounds of.....	45
Nurses, Boston Directory for.....	451	Pessary embedded in Vaginal Tissue.....	429
“ Directory.....	186	Pessary of Flesh.....	95
Obituary.....	71, 262, 431, 528	Pessaries, Rules for Use of.....	46
Obstructionists.....	114	Phagedenic Chancre, Large.....	118
Oesophagoscopes.....	117	Pharynx, &c., Complete Extirpation of.....	70
Offutt, T. Z.....	183	Phthisis.....	73
Oophorectomy.....	158	Physiology, <i>Foster and Reichert</i>	327
Ophthalmia, Treatment of Gonorrhœal by Copaiba.....	409		
Opie, Thomas.....	176, 196		
Opium Poisoning.....	111		
Optic Neuritis.....	145, 157, 171		
Optico-Ciliary Neurotomy.....	452		
Original Papers, 1, 5, 25, 33, 49, 58, 79, 88, 97, 100, 103, 107, 121, 125, 241, 129, 145, 148, 150, 153, 169,			

	PAGE.		PAGE.
Physiology, Human, <i>Flint</i>	16	Rectotomy, External.....	350
Pilocarpin in Scarlatinal Nephritis	47	“ “ in Benign Stric-	
Pistol Wound of Abdomen.....	205	tures of Rectum.....	313
“ “ “ Finger with Fatal		Rectum, Cancer of.....	562
Tetanus.....	206	“ Diseases and Surgery of,	
Pistol Wound of Leg.....	207	<i>Van Buren</i>	65
Placenta, Retained.....	324	Rectum, Imperforate.....	447
Pneumogastric Nerve, Influence of		Red Cross, Concours of.....	422
Pressure on.....	565	Refrigerator Apparatus.....	163
Pneumonia, Abortive.....	305	Registration Fees.....	455
“ Infectious.....	260	“ Laws, State.....	423
“ Nature and Treatment		Reid, E. M.....	540
of.....	121	Renal Cysts.....	447
Pneumonia, Traumatic terminating		Rennolds, H. T.....	279, 318
in Gangrene.....	305	Resolution, An Excellent.....	43
Politics, some Points in Medical..	505	Respiration, Artificial in Still-Birth.	167
Polypus, Uterine, Expelled in a Fall	142	Responsibility of State and Individ-	
Popular Science Monthly.....	255	uals.....	367
Porro's Operation, Results of.....	329	Retinitis, Albuminuric.....	418
Post-Graduate Course.....	452	“ Pigmentosa.....	156
Post-Mortem, Earliest in America..	143	Reviews, Books and Pamphlets. 15, 64,	
Practice of Medicine, Manual of,		112, 160, 236, 284, 309, 327, 353, 380,	
<i>Moir</i>	380405, 424, 499, 524, 546	
Precautions Against Diphtheria.....	452	Rheumatism, Blister Treatment of	
Pregnancy, Coition During.....	260	Acute.....	549
“ Hemorrhage During....	419	Rheumatism, Cerebral487,	541
Presbyterian Eye and Ear Charity		Richmond, On to.....	21
Hospital, An. Rept.....	406	Rindfleisch, Prof.....	371, 391
President, The.....	166, 187	Rohé, George H.....	21, 25, 320
President's Case, Medical Aspects		Salicylate of Sodium for Ferment-	
of.....	257	ing Urine.....	239
Prevention, General Principles of....	33	Salicylates in Acute Rheumatism.	454
Priapism, Note on.....	555	“ Delirium and Tinnitus	
Prize, Alumni.....	119	from.....	542
“ Committee.....	408	Salicylic Acid Formulæ.....	191
“ Essay.....	261	Sanitary Inspectors and their Rela-	
“ Ex-Presidents'.....	550	tions to the Profession.....	422
Prizes.....	95	Sanitary Tracts. 33, 43, 58, 88, 107,	
Prostate, Cancer of.....	492	153
Prostitution, Regulation of.469, 502,	518	Sanitary Visitation.....	66
Psylum Seed in Constipation.....	47	Sarcoma and Carcinoma.....	116
Pulmonary Diseases, Treated at		Sayre's Jacket, Fatal Result from.	117
Mt. Dore, France.....	513	Scarlatina, Precautions against.....	58
Pyæmia, Prevention of.....	262	Scarlatina and Diphtheria, Propy-	
Pylorus, Excision of.....	22	lactic for.....	143
Pyrogallic Acid, Death from Local		Schools, Opening of Medical.....	216
Use of.....	358	Scrofuloderm, Small Pustular.....	232
Quinan, John R.....	292	Scrofulous Neck, Origin and Cure	
Quinine Amaurosis.....	69, 167	of.....	260
“ As an Oxytotic.....	287	Scurvy, Etiology of.....	502
“ in Traumatic Fever.....	47	Scurvy, Two Cases of with Remarks	
“ Use and Abuse of.....	521	on Etiology.....	148
Radius, Fracture of.....	564	Sections, Ophthal. and Obstet. of	
Recip. Action of Morbid Bodily		Faculty.....	380
and Mental Influences.....	567	Sellman, W. A. B.....	79
Rectal Alimentation.....	70	Sewerage in Europe.....	496

	PAGE.		PAGE.
Sewerage, Requisites for Good.....	549	Testicle, Carcinoma of.....	476
" System of Baltimore.....	449	Tetanus as Recently Prevailing in Baltimore.....	184
Shoulder-Joint Amputation, Second- ary Hemorrhage in.....	142	Tetanus from Toy Pistol Wound, Recovery.....	279
Sims, J. Marion.....	273, 282	Tetanus Traumatic, Cured by Cam- phor.....	305
Skin, Minute Anatomy of.....	231	Theobald, Samuel.....	222
Small-pox in Baltimore.....	326	Therapeutics, <i>Gubler</i>	16
" Prophylaxis of.....	541	Thermometer, Intra-Uterine.....	324
" Pustulation in Fœtus in " Utero.....	443	Thomas, Richard H.....	469
" and Vaccination, Re- marks on.....	481	Thomson, I. D., Death of.....	119
Smith, Samuel P., Obituary of.....	528	Thompson, William H.....	73
Societies, Baltimore Medical.....	283	Tiffany, L. McLane.....	169, 200, 433
Societies, Work in Medical.....	66	Tobacco, Effect on Bony Tissue.....	117
Society Bulletin. 23, 46, 69, 262, 288, 311, 335, 384, 408, 431, 456, 480, 503,	527, 551	Toner Library.....	114
Society Reports. 10, 35, 62, 89, 92, 109, 132, 156, 158, 208, 231, 252, 280, 303, 306, 323, 349, 351, 398, 401, 416, 445,	474, 494, 521, 541, 543, 560	Tongue, Excision of for Epithelio- ma.....	359
Specialists.....	45	" Furred, of Indigestion.....	407
" and General Practitioners.....	93	" Hypertrophy and Prolapse of.....	169
Specialization in Practice.....	67	" Swallowing of the.....	68
Splints, Croft on Plaster.....	261	Tonsil, Abscess of.....	111
Sponge-Grafting.....	426	Townshend, Smith.....	139
Spray, Abandonment of.....	238	Tracheotomy.....	474
Staphylorrhaphy, Instrument for Passing Sutures in.....	401	Transplantation of Bone.....	115
Stomach, Resection of Cancerous.....	116	Treatment, Methods of.....	262
Stricture of Oesophagus.....	39	Trephine, When Justifiable or Ad- visable?.....	385, 447
Suicide.....	41	Trephining Done Five Times.....	358
" by Dynamite.....	188	Tribute, A Worthy.....	46
" Singular Attempt at.....	167	Tubercle Inhalation.....	69
Superstition, Curiosities of.....	241	Tuberculosis.....	371, 391
Surgeon, The Mechanical.....	334	" Acute, Mistaken for Typhoid Fever.....	188
Surgeons, Responsibility of Modern.....	260	" Miliary, Infectiousness of.....	330
Surgery before and since Antiseptic Method.....	287	Turnipseed vs. Nutshell.....	427
" Limits of Operative.....	260	Typhoid Fever, Inoculation against.....	502
" System of, <i>Holmes</i>	236, 424	Umbilical Cord, Artificial Anus From Tying Bowel With.....	446
.....	524	University of Maryland.....	527
" Teaching of.....	183	Urine, Chemical Analysis of, <i>Smith & Marshall</i>	286
Sweating in Certain Animals.....	100	Urticaria.....	25
Symptoms.....	216	" from Iodide of Potash.....	118
Syphilis, Criminality of Communi- cation of.....	19	"Use as Directed".....	498
Syphilis, Treatment by Hypodermic Injection.....	265	Uterine Inertia, Hemorrhage and Retained Placenta, Electricity in.....	143
Syphilitic Ulceration of Larynx and Pharynx, Local Treatment of.....	29	Uterine Pathology, Shortcomings of.....	19
Tar Water in Obstetrical and Gyne- cological Practice.....	19	Uterus, Anteflexion of, Relations to Dysmenorrhœa.....	355
Teeth Swallowed During Sleep.....	22	" Applications to Interior of Body.....	100
Temperature, Fictitious High.....	383	" Cancer of in the Negro... ..	68
		" Extirpation of for Cancer.....	420

	PAGE.		PAGE.
Uterus, Laceration of Cervix.....	453	Virginia Medical Monthly.....	20
“ Rupture Treated by Drain- age.....	383	Vivisection Prosecution in England.	380
“ Dangers from Susceptibili- ty of.....	501	“ Resolution on.....	216
“ Tumor from.....	323	“ Results of.....	239
“ and Vagina, Absence of..	411	Waldenberg's Pneumatic Treat- ment.....	334
Vaccination with Bovine Lymph....	536	Walls, William J., Cbituary of.....	71
“ Compulsory in France	21	Walsh's Physician's Handbook, &c., <i>Walsh</i>	354
“ in Erectile Tumors.....	328	Washington Training School for Nurses.....	95, 359
“ Inoculation and Small- pox.....	388	Water, Drinking of Maryland.....	570
“ Is It Protective to Fœ- tus?.....	444	Water Supply of Baltimore.....	284
“ Scarlet Rash after.....	419	West Virginia Board of Health.	116
Vaccine Lymph, Artificial.....	189	Wilderness Cure, <i>Cook</i>	310
Vagina and Uterus, Case of Ab- sence of.....	411	Wiltshire, J. G.....	319
Vaginal Injection, Death from.....	143	Winchester Observatory, Report, <i>Waldo</i>	237
Vaginal Membrane, Spontaneous Rupture of.....	448	Winslow, Randolph 103, 203, 278, 301,	313, 492
Vaginal Plexus, Profuse Hemor- rhage from.....	522	Woman as Physician.....	335
Venereal Diseases, Prevention of.	413, 440	Women Physicians.....	21
Venom of Serpents, Antidote for.....	187	Woman's Medical College of Balti- more.....	500
Ventricles, Prolapse of Laryngeal.	544	Wood, Thomas F.....	143
Vertebra, Fracture of by Muscular Action.....	329	Wounds in Battle, First Treatment of.....	240
Vertebræ, Treatment of Old Frac- tures of.....	187	Wrist and Palm, Induration of.	109
Vesico-Vaginal Fistula.....	21	Writer's Cramp.....	67, 547
		Year, New.....	404
		Yellow Fever Epidemic of 1855...	569
		York Hospital and Dispensary, Doctors' Opening of.....	62

THE END.

